DOCUMENT RESUME

ED 226 140 CE 034 936

TITLE	Arizona Model for Vocational Assessment: A Procedural Guide.
INSTITUTION	Arizona State Dept. of Education, Phoenix.; Arizona Univ., Tucson. Coll. of Education.
PUB DATE	Dec 82
NOTE	91p.
PUB TYPE	Guides - Non-Classroom Use (055)
EDRS PRICE	MF01/PC04 Plus Postage.
DESCRIPTORS	Career Choice; *Career Planning; Guidelines; *Individualized Education Programs; *Models; Occupational Clusters; Secondary Education; *Self Evaluation (Individuals); *Vocational Education; *Vocational Evaluation
IDENTIFIERS	*Arizona

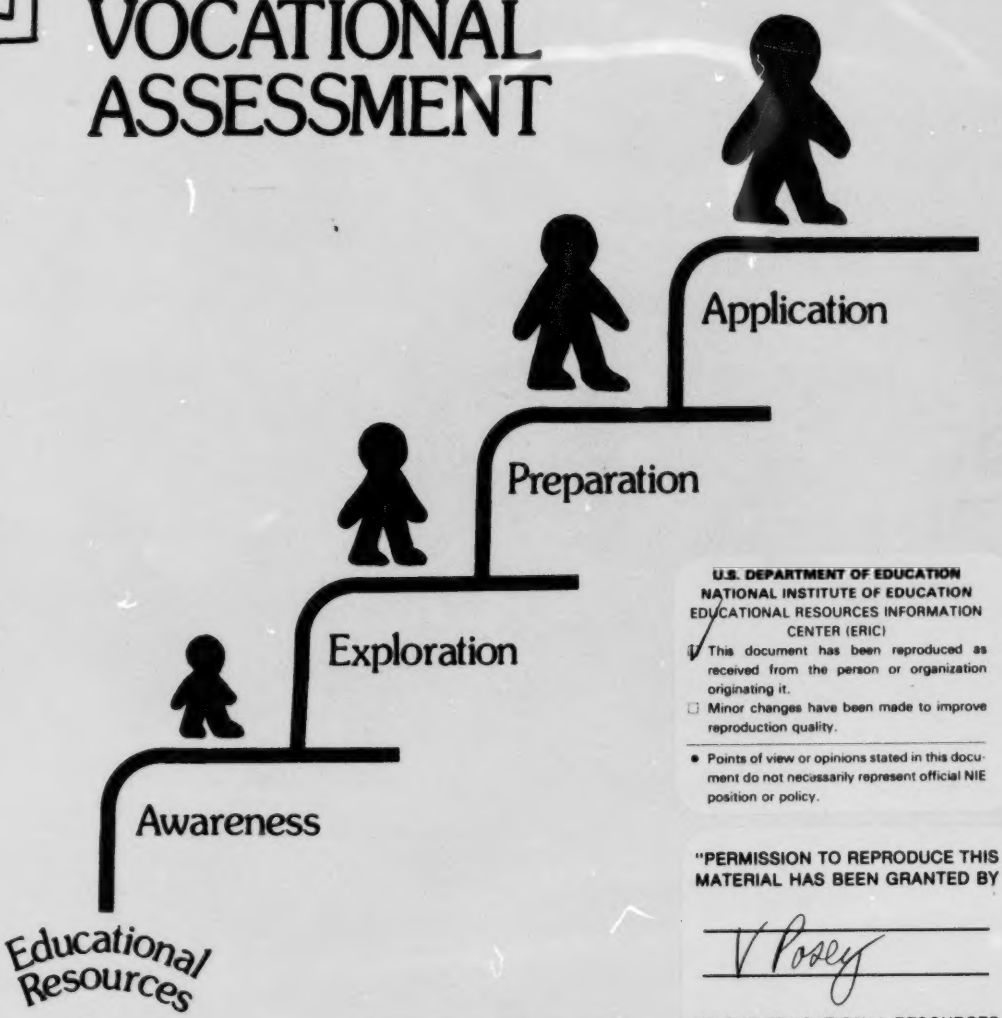
ABSTRACT

This guide is intended (1) to facilitate individualized planning for students to ensure that their education is as appropriate as possible and to give them relevance for the work they do in school; and (2) to aid communication among staff members, parents, and students by establishing a planning process. This guide leads the counselors, teachers, administrators, and students through a process of individual assessment and data collection that will help identify career goals and systematize planning to achieve them. The guide is organized around the following six areas that are considered basic to a comprehensive vocational assessment of individual students. These categories are job awareness, needs, skills and abilities, work habits, interests, and daily living skills. Six sections present detailed strategies for collecting student information relating to these six assessment categories. A detailed description of each category includes the expected outcomes associated with it and examples of assessment methods. At the end of each section a summary sheet provides space to record the results and organize the data to be transferred to the Assessment Profile (which is the topic of the final section of the plan guide) and to aid in the creation of an individual vocational education program. A glossary, resources, and references are provided in appendixes to the guide. (KC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED226140

ARIZONA MODEL FOR VOCATIONAL ASSESSMENT



U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

V Posey

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

A PROCEDURAL GUIDE

CE 034936

University of Arizona
College of Education
Arizona Department of Education
Carolyn Warner, Superintendent
Dr. Jim Hartgraves, Deputy Superintendent
Dr. Ray Ryan, Deputy Superintendent
December, 1982

Cover designed by

Karen Zopf
University of Arizona

Equal Opportunity/Affirmative Action Employer

ARIZONA DEPARTMENT OF EDUCATION

Carolyn Warner, Superintendent

Dr. Jim Hartgraves — **Deputy Superintendents** — **Dr. Ray Ryan**

Education Services	General Operations	Vocational Education
Dr. Thomas R. Reno	James J. Brunstein	Dr. Ray D. Ryan
Associate Superintendent	Associate Superintendent	Deputy Superintendent

STATE BOARD OF EDUCATION

STATE BOARD OF VOCATIONAL EDUCATION

ARIZONA STATE BOARD OF EDUCATION

Dr. George N. Smith ..... President

Julieta Bencomo ..... Vice-President

Honorable Carolyn Warner ..... Executive Officer

Eddie Basha ..... Member

George Evans ..... Member

Geraldine Hernbrode ..... Member

Dr. Eugene M. Hughes ..... Member

Dr. Don McIntyre ..... Member

Honorable David Silva ..... Member

Total Copies Printed — 100
Total Printing Cost — $335
Unit Printing Cost — $3.35
Date of Printing — 11/82

Second Printing — 1/83
Total Copies — 4900
Total Printing Cost — $5700
Unit Printing Cost — $1.17

CAROLYN WARNER
SUPERINTENDENT

Arizona
Department of Education
1535 WEST JEFFERSON
PHOENIX, ARIZONA 85007
255-4361

December 1982

The Arizona Department of Education is committed to insuring that all students in the public school system are provided an educational experience that addresses their individual needs and that allows them to reach their maximum capability as contributing members of our society. It is this philosophy that prompted the efforts which led to the development of the "Arizona Model for Vocational Assessment: A Procedural Guide," as well as other manuals and handbooks sponsored by the Department.

It is our feeling that this Guide addresses a critical need in our schools today, that is, the need for individualized planning on behalf of all students to insure their education is as appropriate as possible and to give them relevance for the work they do in school. In addition, for the process to function effectively, it is essential that each district and each school bring about an efficient communication network among involved staff to establish a planning process which helps the students and, in turn, helps the school staff by whom they are served. The Arizona Model for Vocational Assessment provides a suggested structure through which these two objectives might be accomplished.

It is our hope that educators will take this structure and adapt it to their individual needs to provide their students a comprehensive vocational assessment experience and a relevant individualized vocational education plan (IVEP). If this is done, we will surely be able to affirm that each student is given the chance to be all that he or she can be.

We express our appreciation to the Vocational Evaluation Task Force and to the many school districts and professionals whose contributions make this Guide a high quality document we can all be proud of.

Ray Ryan
Deputy Superintendent and
State Director, Vocational Education

FOREWORD

In May 1980, a group of professionals from throughout the State of Arizona, including educational administrators, teachers, counselors, vocational evaluators and others, met to discuss vocational assessment and individual student planning. It was their unanimous opinion that a structured comprehensive student vocational assessment was needed that would both allow involved professionals, parents and students to communicate better and enhance vocational/career planning. As a result of this meeting the Vocational Evaluation Task Force was formed and eventually the "Arizona Model for Vocational Assessment: A Procedural Guide" was developed.

This developmental process began in September of the same year with the first task force meeting. A series of meetings, a lot of trial and error and a sustained belief in the project's goal led to the publication of the guide in its draft form in March 1981. Prior to any attempt to finalize such a document, a comprehensive strategy was developed for disseminating and field testing the guide and obtaining evaluative feedback from districts throughout the state. This strategy included: nine regional workshops to inform and obtain comments from district and building level staff; a formal field test conducted by the National Center for Research in Vocational Education with districts representative of all areas in the state; and a final evaluation and revision workshop to integrate all of the suggestions and modifications that had been made. After this lengthy and extensive process, the guide is now available for use in public school districts and by individual professionals throughout the state. The intention of the guide is not to provide a "cookbook" or a "how-to manual," but rather to offer a suggested structure and possible methods to enhance individual student learning and overall communication among professional staff. Districts are encouraged to modify or adapt this guide as necessary and to modify any forms that are suggested to meet their individual needs. The object of the whole developmental process described above was to provide a guide complete enough and flexible enough to be workable in any environment or location. We feel this goal has been accomplished. Finally, you are encouraged to use this procedural guide to enhance the already commendable efforts extended on behalf of the students we all serve.

ACKNOWLEDGMENTS

This publication represents the efforts of people across the state of Arizona who are committed to quality vocational education and improved vocational assessment. The Task Force on Vocational Evaluation was convened by the Director of Vocational Special Needs, Arizona Department of Education, and conducted under the auspices of the Vocational Education Special Needs In-service Projects at the University of Arizona and Northern Arizona University. The cooperative efforts and contributions of Task Force members are greatly appreciated.

Vocational Evaluation Task Force

Bob Anderson	Dean Petersen, Consultant
Phil Barry, Consultant	Virginia Posey, Project Director
James Fredrick	Ed Robinson
James D. Good	Trudy Rogers
Bill Hart	Bill Sisco
Carl Hurlburt	Harold Thomas
Stewart Miller	Betty Rovedo

In addition, the Ad Hoc Committee on Vocational Evaluation contributed significantly to the scope and direction of this project through their participation in the initial planning and review stages.

Special thanks are extended to the National Center for Research in Vocational Education at Ohio State University for their guidance and assistance in field testing the guide throughout Arizona. Finally, we wish to express our deepest appreciation to all the school districts and to the countless administrators, teachers, counselors and other staff members who participated in this project. Without their sincere interest, support, professionalism and true caring for the students they work with, this guide and student planning process would never have become a reality.

TABLE OF CONTENTS

	Page
FOREWORD	i
ACKNOWLEDGMENTS	iii
INTRODUCTION	1
INDIVIDUAL ROLES	3
Assessment Categories	5
Strategy For Assessment	6
Individualized Vocational Education Plan (IVEP)	7
Figure 1: Vocational Assessment: Individual Roles in IVEP Development	9
Figure 2: Vocational Assessment: Outcomes in IVEP Development	11
Figure 3: Vocational Assessment: Process and Strategies	13
JOB AWARENESS	15
Interview Questionnaire	17
Summary Sheet	19
NEEDS	21
Interview Questionnaire	23
Summary Sheet	25
SKILLS AND ABILITIES	27
Profile	29
Summary Sheet	31
WORK HABITS	33
Prevocational Assessment Questionnaire	35
MDC Behavior Identification Form	37
Summary Sheet	39
INTERESTS	41
Interview Questionnaire	43
Summary Sheet	45
DAILY LIVING SKILLS	47
Job Survival Skills Criterion Check List	49
Summary Sheet	55
VOCATIONAL ASSESSMENT AND PLAN DEVELOPMENT	57
Student Profile and Summary	59
Vocational Assessment Summary	61
Individual Vocational Education Plan	65
Individual Vocational Education Plan Component (IVEP)	67
Individual Vocational Education Program (IVEP)	69

APPENDIXES

OCCUPATIONS BY CLUSTER	Appendix A	73
GLOSSARY OF TERMS	Appendix B	77
STUDENT ASSESSMENT AND PLANNING PROCESS	Appendix C	85
TESTS AND PUBLISHERS	Appendix D	87
COMMERCIAL WORK SAMPLE MANUFACTURERS	Appendix E	91
RESOURCES FOR OCCUPATIONAL INFORMATION	Appendix F	93
REFERENCES AND SELECTED BIBLIOGRAPHY	Appendix G	95

INTRODUCTION

Vocational/career planning is the process by which information about a student is collected and used as the base upon which the student, with appropriate assistance, can specify a plan of action indicating how he/she will progress from his/her present status to the achievement of identified educational/career goals. This procedural guide presents a technique for organizing this information about an individual for the purpose of vocational/career planning. It can be used as a basis for a system of data collection and reporting. It might also be useful as a guide to assist in training new staff. Its focus is vocational assessment–helping people make decisions concerning jobs and careers based on an analysis of themselves and the world of work. In order to do this effectively, the counselor, evaluator or teacher needs sufficient information to understand the student's unique blend of interests, needs, skills and abilities. This data can be collected in various ways, from reviewing the student's file to a formal vocational evaluation. In most cases a structured interview with the student provides at least a starting point for additional vocational planning and exploration. The format provided here allows this information to be organized into six categories concerned with occupational decision making. If current information in one or more categories is considered insufficient, strategies are suggested for obtaining additional data. If it is decided that a formal vocational evaluation would be beneficial, the method described in this guide can help formulate specific questions and issues to be addressed by the evaluator.

The guide does not make assumptions about the extent of assessment available or the resources and equipment used, if any. Rather, it is intended to be used as an aid for gathering and analyzing information. It can be adapted or changed as necessary. Its use should generate recommendations for further student involvement in vocationally related activities and gradual clarification of career directions. Actual work settings, a vocational evaluation center, or the counselor's office may provide the data. Each has its advantages and disadvantages. Ideally, all three would contribute to each individual's assessment profile. However, this technique is designed to integrate information from whatever sources are available into a meaningful vocational plan. It is intended and hoped that an individual plan would be revised on an ongoing basis as the student progresses through his/her educational experience.

Organizing the planning process according to this guide can benefit both the student and the educator. Areas needing additional attention are readily targeted, and consistencies (or inconsistencies) between available data and the student's vocational objectives are clearly identified. Detailed information can be conveyed in a relatively short time, and planning can include both traditional and nontraditional components of the academic process depending on the specific needs of the student. Both long and short-range objectives can be formulated, with materials organized to give a clear picture of the student's strengths and limitations in a vocationally relevant context. Since teachers and counselors are now working with students with a wider range of abilities than in the past, the level of expertise expected of education's professionals has increased, and they are exhorted to "work smarter, not harder" to keep up with the changes. This guide is designed to facilitate structured interactions among the student, the counselor and other staff as well, making optimal use of increasingly scarce time.

Another purpose of this procedural guide is to encourage more effective communication between counselors, teachers, administrators, vocational evaluators, students and parents. Each plays a distinct and important role in developing and implementing the Individualized Vocational Education Plan (IVEP), and the information provided by one must be understandable and usable by the others. This instrument can provide a frame of reference for communication among professionals. It should prove especially helpful to the professional filling more than one of these roles. The person whose duties encompass teaching, counseling and/or evaluating in one position is often expected to function without the benefit of formal training in each of these areas. This guide can help organize individual student data so that an IVEP is readily developed. Experienced vocational evaluators and guidance counselors will find it a useful resource for report writing, presentations and in-service training.

INDIVIDUAL ROLES

Within any school system, a number of individuals, both staff and others, will play an important role in this process. In addition, each individual stands to gain something from the effective operation of this system of data collection and planning. A brief discussion of the roles and benefits of these individuals follows. It is not intended to be an exhaustive summary, but rather a synthesis and analysis of staff/individual functions and benefits to be gained.

1. **Administrator.** School administrators should benefit from the implementation of this guide by improved communication between the school and the public, and among the professional staff. This in turn will lead to offering courses and supportive services better tailored to the needs of the individual student.

   The role of the administrator is to provide the leadership and support necessary to integrate a systematic vocational assessment program into existing programs. New channels of communication often must be opened before this information can be used effectively, and the professional staff needs the support and encouragement of administration to open these channels. Utilization of the IVEP developed from vocational assessment will depend on the level of understanding of the plan by all educational and supportive staff. The administrator can provide them with the opportunity to develop this understanding.

2. **Teacher.** This guide will assist teachers in understanding the process of a student's vocational decision making. A rationale for selecting vocational classes and programs should be supported by vocational assessment and reflected in the IVEP. With this plan the teacher can better understand a student's strengths and limitations and allow for a more individualized focus on course content when necessary.

   The teacher's unique responsibility is to translate the information provided by the counselor and/or vocational evaluator into appropriate instructional objectives for the student. Feedback from the teacher to the counselor/evaluator also allows constant improvement in the assessment process. Reports to administrative staff on the progress of the student and the utility of the assessment process are also beneficial for future planning. This process is meant to enhance communication and interaction among staff and involved individuals.

3. **Vocational Evaluator.** This guide provides a method for organizing a vocational evaluation and the information generated. It provides a useful tool for communicating with other education professionals and explaining the types of information produced in the vocational evaluation center. Also, this system can be used to help structure the referral questions of the teachers and counselors requesting vocational evaluations. They can provide available information in a format useful to the evaluator, allowing the focus of the formal evaluation to be on areas where information is most lacking.

   In an educational setting the vocational evaluator will most often act as an in-house consultant to those responsible for developing the IVEP. The evaluation center is where in-depth assessment of work-related skills and abilities is possible, usually on an intensive, time-limited basis. The extent of these services may vary depending on the student and the referring teacher/counselor. Not all students will require exhaustive evaluations for appropriate plans to be developed. It is the evaluator's responsibility to accurately estimate the amount of assessment necessary to answer referral questions. To make recommendations for future vocational planning, the evaluator must be familiar with the resources available within the school system, including coursework, work experience programs and extracurricular activities. Finally, the evaluator must be able to establish a working rapport with other professionals and gain their confidence in the utility of the vocational evaluation report.

4. **Counselor.** Improved communication is the key benefit for the counselor using this guide. It can help in dealing with students and parents, teachers, administrators and evaluators. This vocational assessment system will provide an improved information base for vocational decision making and plan development. It will allow more adequate projections of student needs and streamline interactions with other professional staff. And it provides a measure of individual student's progress toward vocational goals and objectives.

   The counselor's responsibility is to develop an IVEP with the student, based on vocational assessment data. By organizing information into the six major categories as it becomes available, the counselor can identify unanswered questions and take action to obtain additional data. The counselor must be able to identify available resources for further diagnostic testing, vocational exploration and background information. In addition, it is often up to the counselor to know the procedures for gaining access to these services.

   Ideally, the counselor plays a coordinating role in collecting pertinent information about a student to assist him/her in the vocational/career decision-making process, and in the development of the individual plan. This guide provides a method for interaction and sharing information with others involved in the individual plan development and utilization. As a result of this central role, the counselor is in a unique position for evaluating the effectiveness of the vocational assessment process and recommending changes as needed.

5. **Student.** The student is the center of the system, the individual around whom the process outlined in the guide and the developed IVEP revolves. The student using this vocational assessment system will gain greater self-knowledge and understanding. It provides an improved information base upon which the individual student can make decisions and plans for future educational and career attainments.

   The vocational assessment system and the IVEP provide the student with a means of determining his/her progress toward vocational goals and objectives. As new information becomes available through the continuous accumulation of data and updating, the plan can and should be periodically revised. The updating and revision should involve the student, parent(s), counselor and appropriate teachers and should take place at least once a year. The student should be encouraged to actively contribute information, participate in the evaluation of the information secured about him/her, participate in the evaluation of progress toward goals and objectives, and participate in the revision of the IVEP.

6. **Parents.** As the adult responsible for the student, the parent(s) should be directly involved in the securing of information about the student in the development of the IVEP, and in the revisions of the IVEP.

   The information about each student should be made available to parents in a form that will be meaningful to them and to the student.

   The parent will then better understand why the student is taking specific classes and how they might contribute to their child's growth and development. Parent input should be sought and utilized in the evaluation of the overall effectiveness of the assessment process and plan development and implementation.

For further clarification and a graphic representation of the student vocational assessment process and how these individual roles function in this process, see Figure 1, Figure 2 and Figure 3 at the end of the Introduction section.

Assessment Categories

The following six areas are considered basic to a comprehensive vocational assessment of an individual student. Each must be addressed, although all of them may not require an in-depth evaluation. The basis for the six categories was suggested by Dunn, et al., in *Critical Issues In Vocational Evaluation* (1976), and further developed by the Arizona Task Force on Vocational Evaluation. These six categories include the specific skills, behaviors and other factors essential to effective career planning and decision making.

Job Awareness

Vocational awareness refers to a person's level of understanding about work in general and perception of what specific jobs or career areas entail. This means knowing about practical skills, training requirements, working conditions and responsibilities. The jobs most of us learn about first are those of our parents. As we expand our contact with the community we learn about the jobs of others. By learning more about work and various career areas, more informed decisions can be made about career goals and preparation for work.

Needs

The process of identifying feasible career goals includes such practical considerations as what jobs are available locally, how much training is necessary and where does a person get such training. For people in special populations, the issues often become more complex. An individual may have special needs related to amount or type of supervision, accessibility of the job or training site to public transportation, language used or holidays honored among others. Therefore, in planning educational programs and vocational guidance, consideration of these needs allows a realistic approach. Individual needs are most directly assessed by interviews with the student, parents and teachers. However, it is often advisable to place the person in a work situation, real or simulated, for a period of time for observation of actual performance and problems encountered. A formal vocational evaluation will often serve this purpose.

Skills and Abilities

A clear understanding of a person's abilities and skills is certainly basic to vocational guidance and career planning. With this knowledge, a program can be developed to improve deficit areas, and identified strengths can be emphasized in the career exploration process. These strengths and weaknesses need to be understood in terms of the individual, and in terms of people in general. An outstanding athlete is physically gifted compared to others, but this person's other skills and abilities may represent a different pattern that may place those athletic skills in the middle. That is, the athlete may have even greater individual strengths, as well as relative weaknesses. Another person may be average in some things and below average in others. Those "average" skills and abilities are that person's assets, or strengths.

Evaluation of skills and abilities can involve extensive testing with paper and pencil tests, work samples and situational assessment. A formal vocational evaluation can be helpful in these instances. Previous performance in work, hobbies or other outside activities, competencies gained in different classes, and academic achievement test scores are other sources for appraising a person's skills and abilities.

Work Habits

Patterns of behavior, or how a person acts, are often more responsible for losing or keeping a job than the ability to do the work. Behaviors that are appropriate in one work setting may not be allowed in another. Research shows the following vocational behaviors are critically important: attending work regularly, promptness for work, behavior toward co-workers, behavior toward

supervisors, work productivity and quality standard production. Assessment of behaviors must be systematic in order to be reliable, and the most useful information often comes from systematic observations of behavior in a real or simulated work setting. Checklists and behavior rating scales can be used effectively in these situations.

Helping a person change negative behaviors to eliminate or minimize their impact on the person's employability, is a common goal of behavior assessment. Vocational guidance might also focus on career alternatives most compatible with a person's behavioral patterns.

Interests

People's ability to describe their likes and dislikes is often taken for granted. However, research has shown that those with well-developed vocational likes and dislikes tend to be more satisfied in their jobs than people who claim no strong preferences. Young people with limited work experience can often find clues about the kind of work they might like by looking at the activities they enjoy now. Instruments are also available to help sort likes and dislikes, and match them with job clusters. These questionnaires have no right or wrong answers, and they can't tell what things a person would do well. But they can be useful reference points for predicting job satisfaction and can provide direction for further career exploration.

Daily Living Skills

Independence in the basic activities of daily living is a prerequisite to vocational development. Many of these skills, such as grooming, hygiene and transportation use, are considered essential before employment can be considered. Others, like money management, housekeeping and food preparation skills, are not as immediately important, but certainly critical if a person is to achieve living independence in adulthood. Therefore, these areas should be evaluated along with other aspects of vocational development. Commercial questionnaires and locally developed scales or checklists can provide information for program planning. Family involvement is critical if a program leading to functional independence is to be successful. It is important to be sensitive to family members who have traditionally provided for the daily living needs of a young person. However, independence in these areas is a necessary aspect of development that should be addressed as soon as vocational planning begins.

Strategy For Assessment

The following sections present detailed strategies for collecting student information relating to the six assessment categories. A detailed description of each category includes the expected outcomes associated with it and examples of assessment methods. At the end of each section a summary sheet provides space to record the results and organize the data to be transferred to the Assessment Profile. The summary forms can be completed and the plan (IVEP) developed based on information from any source and/or individual(s) (employer, teacher, parent, etc.).

The interview questionnaires, summary sheets and other forms are provided as examples and are intended to give suggestions of information needed in each area. Please feel free to use them, reproduce them and/or develop your own as necessary. Some items may require more space than is provided. Please be flexible and adapt them as necessary for your particular situation.

Many questions in the six categories can be answered in a counselor's office, while many others may require a work setting, vocational education classroom or shop, or a vocational evaluation unit. Answer as many items as possible with available information. Those that cannot be answered can become the basis for referral to vocational evaluation, if available. Asking an evaluator to address specific issues in this way can assure the counselor more useful information in return. It should also make more efficient use of everyone's time. It is important to keep in mind that there

are many alternative methods for acquiring the needed information, some of which are mentioned above. Hopefully, these suggestions will provide you an initial framework to work from and stimulate your own creativity, imagination and expertise.

When you have completed the six summary sheets on a student, you have a package of vocationally related information that is organized to clearly indicate strengths as well as areas needing special attention. This information can then be transferred to the Assessment Profile and used to develop an IVEP. It is possible to make recommendations and develop a plan without going through all six categories. Keep in mind, the intention is to be as comprehensive as possible and to regularly update and revise each student's plan.

Individualized Vocational Education Plan (IVEP)

The IVEP provides a way to organize available information about an individual student, arrive at decisions concerning vocational and educational goals, and develop a plan to successfully achieve the goals that have been set. The individual student for whom the IVEP is being developed, the student's parents, counselor and teachers, the evaluator and other significant adults may all contribute to the planning process.

The IVEP provides the basis upon which the student's class schedule is developed. It can be the basis for developing any needed remedial plans, and for plans to continue indicated normal developmental activities. The IVEP should be revised periodically to include updated information and assess its effectiveness. In some cases the analysis of the IVEP effectiveness and a revision should occur at least once a semester. In other cases this process can be performed once a year.

The following information describes how systematic assessment leads to the IVEP. The process is initiated with the student when the need for individualized planning is recognized. The assessment process begins when a student is referred to a counselor.

The counselor coordinates the collection of data from all involved staff relevant to the six assessment categories. Much of this information is readily obtained from the student, parents and teachers. The student's school file will reflect previous test results and past performance in school. These sources often provide enough information in an assessment category for the counselor to make specific recommendations to be included in the IVEP. The counselor and the student at this stage must decide if more information is necessary in one or more assessment categories.

If the six summary sheets can be completed with the information readily available to the student and counselor, an IVEP can be developed immediately. The student can begin implementing the plan as soon as it can be arranged, and the counselor will continue to monitor and review the student's progress, revising the plan as necessary.

In many cases, however, it will be desirable to gather more information. When the summary sheets have been partially completed, it will become clear which categories require additional assessment. The counselor then must decide on the best way to obtain the data. In many districts, vocation evaluation centers have been developed to serve this purpose. A vocational evaluator has access to tests, equipment and settings that allow more in-depth student assessment than is generally available in the counselor's office. By asking the evaluator to address questions specific to the needs of a particular student, the counselor is more likely to receive information helpful in developing the IVEP. By sharing information already gathered with the evaluator, the counselor can minimize repeated assessment of the same categories and allow the vocational evaluation process to focus on unanswered questions.

The student who is referred to a vocational evaluation center should be prepared in advance for what will take place. The process will probably include a hands-on exploration of a range of career

alternatives. This means the student may be asked to try new activities unrelated to past experiences or preferences. Student cooperation is vital to obtain a true picture of individual assets and limitations.

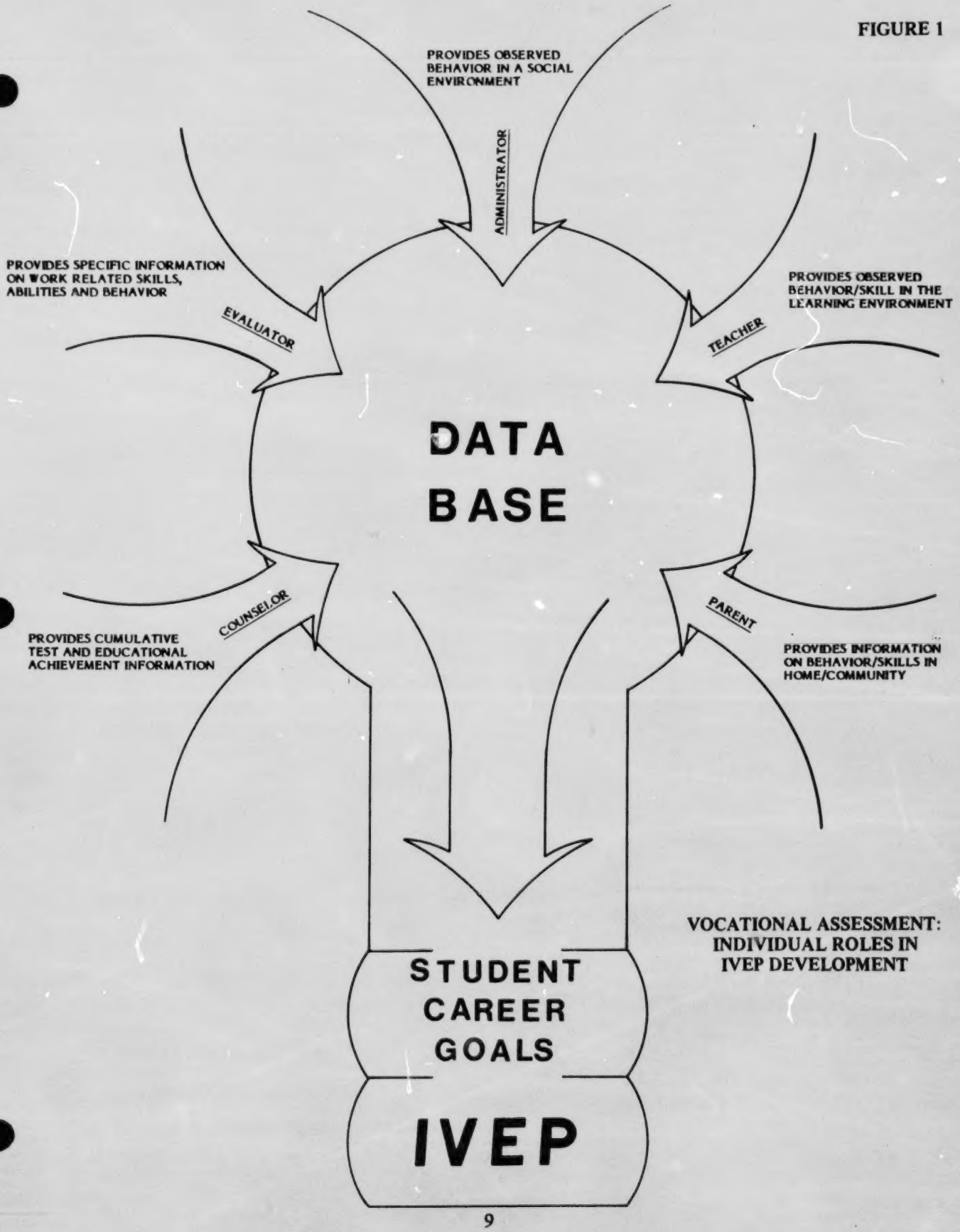
Results of the vocational evaluation are normally reported to the counselor in written form. The evaluator may also include recommendations based on these results. These recommendations can be incorporated into the IVEP along with those of the counselor.

The IVEP should take into account all of the information collected. The student may be actively involved in the process, from completing the summary sheets to formulating IVEP objectives. The counselor is responsible for understanding the scope of the process, establishing realistic objectives based on assessment data and facilitating timely implementation of the plan.

To assist the educator in developing an IVEP, several sources of information have been brought together in this procedural guide. Student questionnaires and assessment summary forms are provided at the end of each assessment section. Separate copies of these should be used as needed for individual students. In addition, seven appendixes have been provided. The first lists occupational clusters from the *Dictionary of Occupational Titles*, the *Occupational Outlook Handbook* and as developed by the United States Office of Education. Information in these assessment categories may suggest one or more occupational clusters as possible vocational goals for a student.

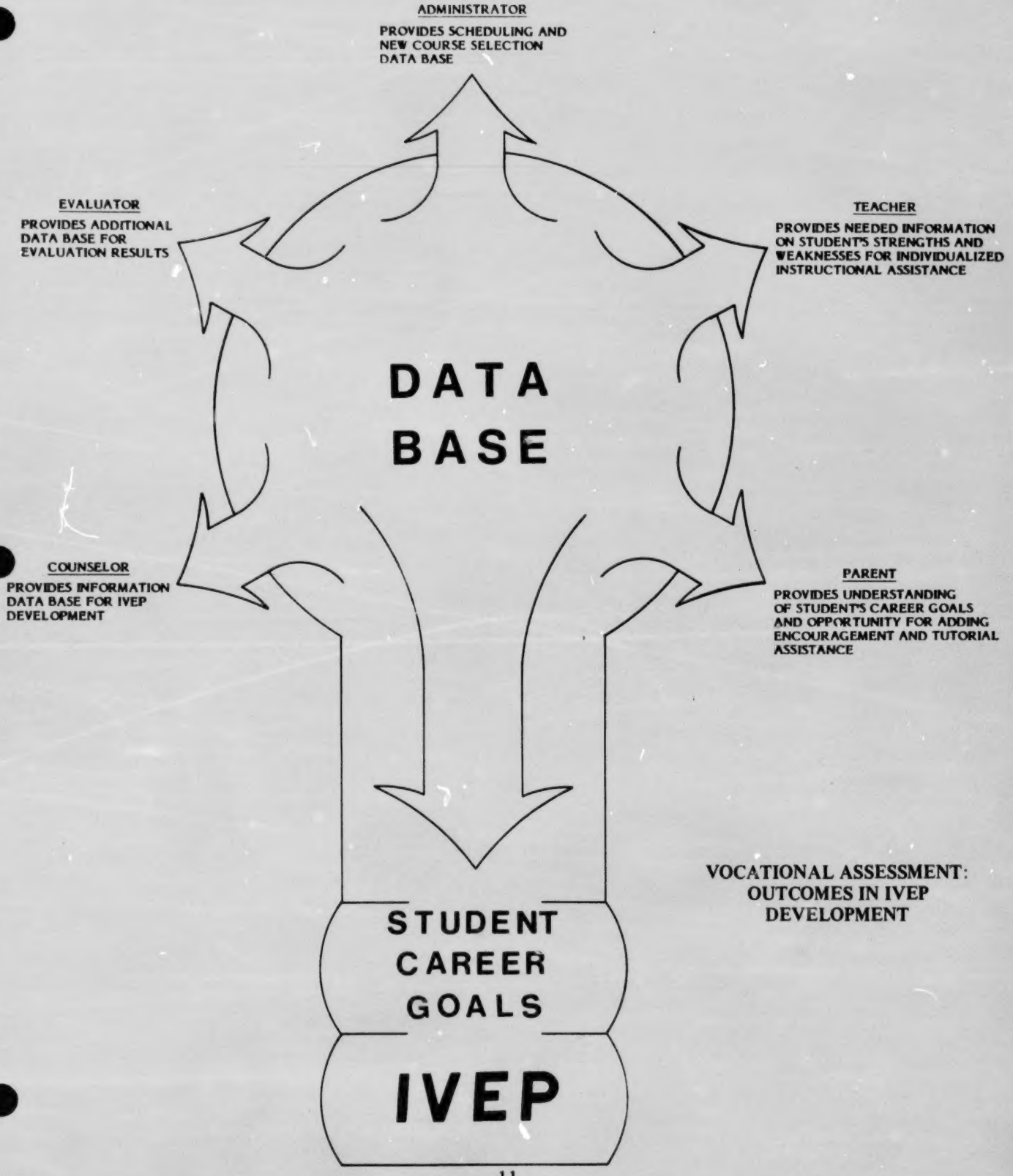
The remaining appendixes include a glossary of terms drawn from the fields of education and rehabilitation, partial lists of commercially available assessment materials, a flow-chart indicating the role of this assessment process in the student's vocational development, a list of resources for occupational information and a selected bibliography for additional reference materials.

FIGURE 1



VOCATIONAL ASSESSMENT: INDIVIDUAL ROLES IN IVEP DEVELOPMENT

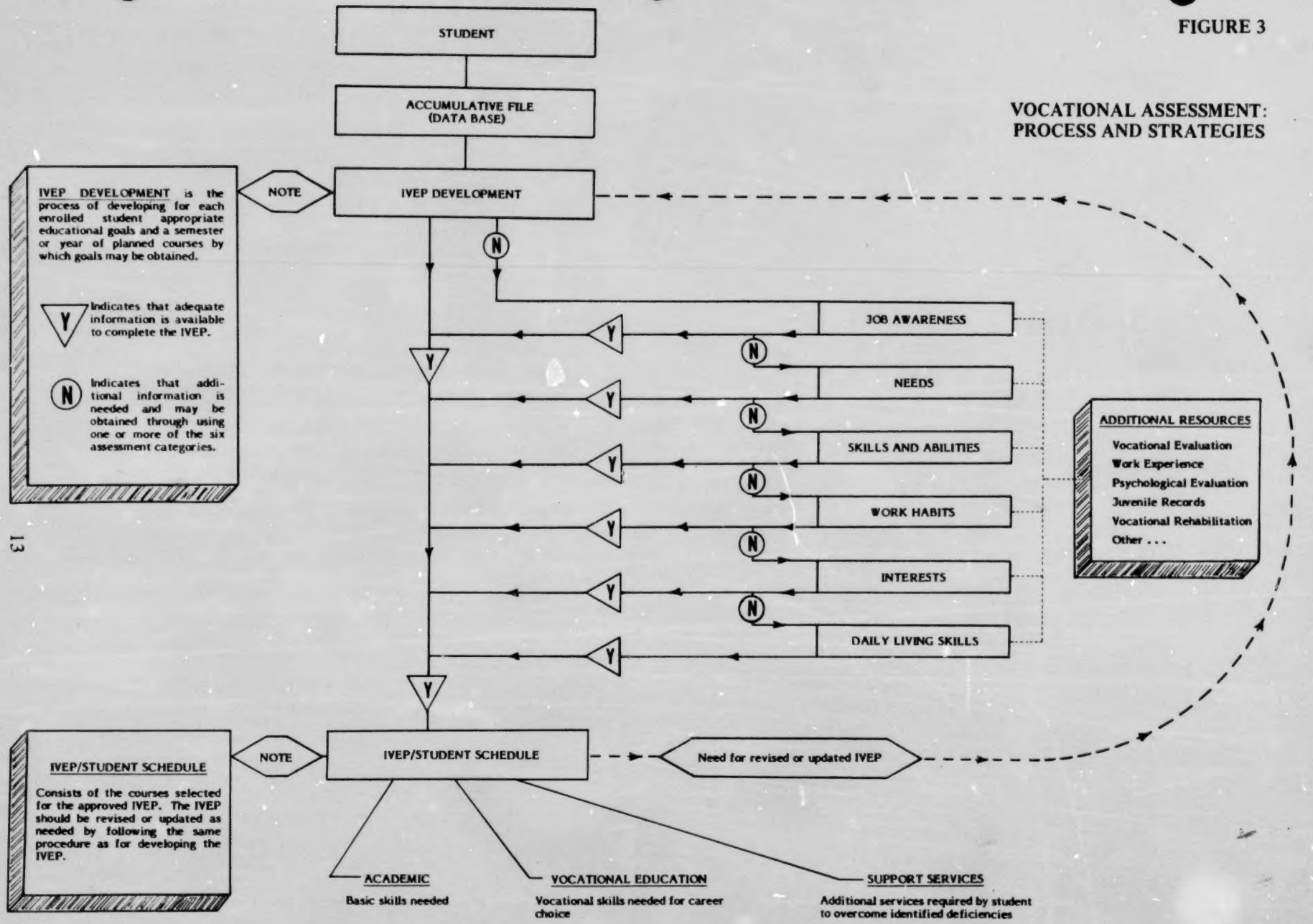
FIGURE 2


ADMINISTRATOR
PROVIDES SCHEDULING AND NEW COURSE SELECTION DATA BASE
EVALUATOR
PROVIDES ADDITIONAL DATA BASE FOR EVALUATION RESULTS
TEACHER
PROVIDES NEEDED INFORMATION ON STUDENT'S STRENGTHS AND WEAKNESSES FOR INDIVIDUALIZED INSTRUCTIONAL ASSISTANCE
DATA BASE
COUNSELOR
PROVIDES INFORMATION DATA BASE FOR IVEP DEVELOPMENT
PARENT
PROVIDES UNDERSTANDING OF STUDENT'S CAREER GOALS AND OPPORTUNITY FOR ADDING ENCOURAGEMENT AND TUTORIAL ASSISTANCE
STUDENT CAREER GOALS
IVEP

VOCATIONAL ASSESSMENT: OUTCOMES IN IVEP DEVELOPMENT

FIGURE 3

VOCATIONAL ASSESSMENT: PROCESS AND STRATEGIES


STUDENT
ACCUMULATIVE FILE (DATA BASE)
IVEP DEVELOPMENT
NOTE
IVEP DEVELOPMENT is the process of developing for each enrolled student appropriate educational goals and a semester or year of planned courses by which goals may be obtained.
Y Indicates that adequate information is available to complete the IVEP.
N Indicates that additional information is needed and may be obtained through using one or more of the six assessment categories.
JOB AWARENESS
NEEDS
SKILLS AND ABILITIES
WORK HABITS
INTERESTS
DAILY LIVING SKILLS
ADDITIONAL RESOURCES
Vocational Evaluation
Work Experience
Psychological Evaluation
Juvenile Records
Vocational Rehabilitation
Other . . .
IVEP/STUDENT SCHEDULE
NOTE
IVEP/STUDENT SCHEDULE
Consists of the courses selected for the approved IVEP. The IVEP should be revised or updated as needed by following the same procedure as for developing the IVEP.
Need for revised or updated IVEP
ACADEMIC
Basic skills needed
VOCATIONAL EDUCATION
Vocational skills needed for career choice
SUPPORT SERVICES
Additional services required by student to overcome identified deficiencies

art by ELDER

JOB AWARENESS

People's perceptions of specific jobs and career areas affect their ability to make educational/career decisions. Therefore, an index of the person's current level of awareness regarding the world of work can facilitate the vocational guidance process. Some of the benefits and expected outcomes to be derived are listed below. Assessment of job awareness can:

1. Improve the likelihood of matching vocational goals with the individual's perception of job duties and training requirements.

2. Identify the need for additional career exploration.

3. Clarify informational needs for individual program planning.

Structured Interview Format

A person's level of awareness of such issues as understanding employer expectations for a given job often becomes apparent through brief discussion. Asking a student to describe the specific skills and abilities required for that job or discussing the academic preparation necessary for various careers can help clarify what is involved in entering different occupations. An interview questionnaire can provide a relatively brief assessment of the person's level of job awareness.

On the basis of a brief structured interview, considerable planning can be accomplished specific to the student's needs. Additional coursework might be recommended along with suitable extracurricular activities. Job site visits might be arranged, followed by trial work experiences. Of course, more in-depth assessment by formal testing or vocational evaluation might also be appropriate.

Commercial Instruments

Several paper and pencil tests that attempt to measure job awareness may be useful to the counselor or vocational evaluator. Some of the appropriate tests are described in other sections of this guide. These include the Career Maturity Inventory, the Vineland Social Maturity Scale and the Wide Range Interest Opinion Test. Several others are also available, and the reader is encouraged to review local test files and catalogues for appropriate instruments.

Vocational Evaluation

A major advantage of vocational evaluation is that it is generally presented as a simulated work setting. The opportunity to experience work activities and become more familiar with the requirements of various jobs are common goals of vocational evaluation centers. Observation of the student's behavior in this setting can lead to a more accurate assessment of job awareness, and general readiness for work.

Of course, simulated job settings might be arranged without the benefit of a vocational evaluation center. Volunteer projects and service club activities provide an introduction to real work, and one of the goals of school work experience programs is to improve students' job awareness.

There are probably other strategies you can use to explore a student's job awareness as well as to increase it through various intervention strategies. You should use whatever approach is most appropriate for your needs and the needs of the students you serve.

JOB AWARENESS INTERVIEW QUESTIONNAIRE

Student Name _____ Date _____

Age _____ Grade _____

1. If you had a job, what would your boss expect of you? What kinds of things would he want you to do? _____

2. If you are working for a company, what rights do you have as an employee? _____

3. If you are working for a company, what are your responsibilities to your boss? _____

4. If you are working with other people, how should you treat them on the job? How would you try to get along with them? _____

5. If you had your choice of doing any three jobs in the world, which three jobs would you choose? _____

6. Explain a few things you would do on one of the jobs you named? _____

7. What do you need to know to be able to do the job you chose? _____

8. How would you get the training needed to do this job? _____

9. What are the working conditions on this job? _____

10. Explain what kinds of other work would be helpful in preparing you for this job. _____

11. If you get this job, could it lead to a higher paying or more advanced job? _____

*Question numbers do not indicate a preferred/required order of presentation nor do the questions exclude coverage of other related topic areas.

JOB AWARENESS SUMMARY SHEET

Student Name _____ Date _____

Staff Member _____

A. Questions to be answered:

1. What is the student's level of understanding of common employer expectations, and employee rights and responsibilities? _____

2. How accurate is the student's perception of the duties and activities involved in specific jobs? _____

3. Is the student aware of training requirements for various jobs? _____

   Working conditions? _____ Benefits? _____

   Advancement opportunities? _____

4. What are the academic skills and requirements for job/careers in which the student expressed interest? _____

5. What is the student's current level of academic skills? _____

B. Strategies for developing additional job-related knowledge:

   Structured career exploration: _____

   Extracurricular activities: _____

   Work experience: _____

   Vocational evaluation: _____

   Courses: _____

   Other: _____

C. Occupational Cluster(s) suggested (if any): _____

NEEDS

A student's personal, social, economic and cultural values and needs are vital considerations in vocational planning. Therefore, individual needs and cultural orientation should be assessed and integrated into the vocational guidance process. Some of the benefits and expected outcomes to be derived are listed below. Assessment of vocationally related needs can:

1. Identify critical variables such as job characteristics, geographical proximity and status.
2. Provide insight into the way different types of work satisfy individual needs.
3. Establish a basis for educational and training goals.
4. Serve as a measure of compatibility between personal, socioeconomic and cultural needs and career/vocational choices.
5. Increase sensitivity and awareness of school staff and faculty.
6. Provide an understanding of effective reinforcers for both work and school.

Structured Interview Format

The most straightforward means of determining a student's needs is through a structured interview. Asking the student and/or parent to explain factors that should be given special considerations allows for vocational planning most appropriate to the individual student. Special needs due to disability can often be accommodated by modification to the work or school setting. A willingness to leave home eventually for work or training may be important if the student's vocational goals cannot be achieved locally. A sample Structured Interview Questionnaire is included in this section of the guide. It addresses these and other issues, and may be filled out prior to an interview by the student and/or parents, or with them at the time of the interview.

Locally Available Resources

Background information can often provide valuable clues to student's needs that may or may not be expressed in an interview. Cultural values, for example, may lead the student to seem non-committal to vocational goals or avoid disagreement with a person in authority; e.g., the school counselor. If the counselor is aware of these issues, alternative strategies for developing the IVEP can be devised. Consultation with teachers familiar with a student and a thorough file review can also provide necessary insights. Psychological and educational records are generally available, and should be considered at the time of plan development.

Commercial Tests

Several inventories are available that attempt to measure and/or prioritize individual needs and values. Some were developed specifically for the purpose of vocational planning, while others provide broad personality profiles that can be useful in vocational decision making. A few of these tests are described briefly on the following pages.

Career Maturity Inventory (CMI)

This test is designed specifically for high school students and provides grade-level norms. It is constructed to measure the maturity of attitudes and competencies that are critical in realistic career

decision-making. The CMI provides two types of measures. The "Attitude Scale" attempts to elicit the feelings, dispositions and subjective reactions an individual has toward making a career choice and entering the world of work. The format for the Attitude Scale is 50 true-false items.

The six "Competence Tests" are more extensive and address such issues as how well the individual can appraise his/her strengths and weaknesses, and knowledge about specific jobs.

The Attitude Scale takes approximately 30 minutes to administer and ten minutes to score. Administration time for the Competence Test is approximately two hours and hand-scoring takes about 20 minutes.

Minnesota Importance Questionnaire (MIQ)

The MIQ presents a number of vocationally relevant needs in pairs, and the individual is required to choose which one from each pair is more important. Status, isolation, recognition and helping others are some of the dimensions included. The MIQ is computer-scored, providing a print-out of an individual's vocational needs hierarchy and a representative list of jobs identified as compatible with those needs. Administration takes approximately 30 minutes, while turn-around time for the computer-scoring is usually about ten days.

Vineland Social Maturity Scale

This scale lists performances that indicate progressive capacity for looking after oneself and for participating in activities that lead toward adult independence and civic usefulness. The items represent activities that increase in difficulty across six categories: self-help (general, eating, dressing), locomotion, occupation, communication, self-direction and socialization. Administration time is approximately one hour and hand-scoring takes about 15 minutes.

AAMD Adaptive Behavior Rating Scale

Developed for use in both institutional and public school settings, the Adaptive Behavior Rating Scale represents years of research and extensive normative data for high school age students. Target populations are the mentally retarded, emotionally maladjusted and developmentally disabled. It is recommended that a person close to the individual being rated fill out the scale, which is divided into two parts. The first addresses specific daily living skills from self-feeding to shopping, money-management and transportation use. Part two deals with maladaptive behaviors, and is divided into ten categories. The public school version includes norms based on 2,600 California school children. Completion time is approximately one hour and hand-scoring takes about 20 minutes.

Interest Inventories

In addition to psychometric tests such as those reviewed above, many interest inventories provide supplemental scales relating to preferred job characteristics and worker traits. Some of these surveys are reviewed in the section on interests in this guide. Results of tests such as these should be explained to the student if possible and can be useful in encouraging discussion of vocational goals.

There are other methods for gathering information about needs (employer contact, behavioral observations, etc.) and you are encouraged to use what is appropriate for your setting and students.

NEEDS INTERVIEW QUESTIONNAIRE

Student Name _____ Date _____

Age _____ Grade _____

1. Do you plan to continue your education or training beyond high school? Please explain. _____
2. Would you consider moving away from home to get the training or education you need? _____
3. After you finish high school or training, what kind of a job could you get where you presently live? _____
4. How far would you be willing to move away from home to find work? _____
5. What would be the ideal work setting for you? Would you prefer to work in the country, city, in an office, outside, etc.? _____
6. Do you have any physical limitations or problems that should be considered in choosing a career/job? _____
7. What kind of work would you like to be doing five years from now? _____
8. What kind of people do you like to work with? _____
9. Will you be able to move up to a better job? _____
10. What kinds of clothes would you like to wear to work? _____
11. How will you get to work? _____
12. How far would/could you travel to work each day? _____
13. On the job do you like to work in one place, or do you prefer to move around? _____
14. Are there things about a job that are particularly important to you? _____
15. Are there any special holidays during which you cannot work? _____

*Question numbers do not indicate a preferred/required order of presentation nor do the questions exclude coverage of other related topic areas.

NEEDS SUMMARY SHEET

_____ _____
Student Name Date

_____
Staff Member

A. Questions to be answered:

1. What are the student's concerns about employment? (e.g., location, pay, advancement)

   Immediate: _____

   Long-term: _____

2. What, if any, postsecondary training are the student and parents considering? _____

   _____

3. How far is the student willing to travel for work/training? _____

4. Unique cultural variables to consider: _____

5. Special needs or job modifications necessary: _____

   _____

B. Strategies for more in-depth needs assessment:

   Parent/teacher consultation: _____

   Vocational evaluation: _____

   Community agency: _____

   Other: _____

C. Occupational Cluster(s) suggested (if any): _____

   _____

SKILLS AND ABILITIES

An individual's innate abilities and acquired skills are cornerstones for vocational planning. Therefore, assessment of functional levels of skills and abilities forms a basis for vocational guidance. Some of the benefits and expected outcomes to be derived are listed below. Evaluations of skills and abilities can:

1. Identify current functional levels, including specific strengths and weaknesses.
2. Estimate potential for success in realistic occupational clusters.
3. Provide information for program planning alternatives specific to age/grade.
4. Enhance the student's awareness of his/her abilities and skills.

Interview and Case Record Review

Considerable information accumulates in a student's record over several years. Standardized achievement test scores and transcripts of completed coursework can identify functional levels in a variety of skills, especially those related to academic performance. Formal and informal work experience, school projects and extracurricular activities also provide for skill development. Basic work-related skills such as tool or equipment use, ability to accurately follow instructions and eye-hand coordination can be assessed to a limited extent through a review of file data and an interview. More importantly, an interview can identify skills or deficits that the student feels are significant, and these can be flagged for direct evaluation in a vocational classroom or vocational evaluation unit.

Specific vocational skills and experience can also be identified through an interview. A student may have learned to operate a piece of heavy equipment, drive a truck and trailer, operate a cash register or design and lay out newspaper ads. Not only might these skills be significant for future planning toward directly related vocational goals, they also demonstrate the ability to learn transferable skills that may be used in entirely new ways. The checklist provided in the Data Summary and Interpretation section can be used to identify specific skills and abilities of vocational significance reflected by the student's achievements to date. Verification of functional levels through hands-on assessment of manual skills is advised unless specific ability levels have already been obtained.

Paper and Pencil Tests

Abilities such as abstract reasoning, verbal problem-solving and artistic judgment can be assessed with the use of commercially available paper and pencil tests. Norms are generally available in the test guide to compare a score with a large sample of scores, usually meant to represent a specific portion of the population (e.g., 12th grade students, computer programmer, technical school students, etc.). A thorough understanding of the test and what it is designed to measure is important before using it. Reading the guide is a necessary part of familiarizing oneself with a test, and several practice administrations provide the opportunity to practice scoring and interpreting the results. While educational or vocational program planning should not be based on test scores alone, they can provide valuable and useful information when used in conjunction with other forms of data.

See Appendix D for a partial list of tests and distributors.

Work Samples

By isolating a set of job-related tasks into a realistic problem-solving situation, a range of general and specific skills and abilities can be directly observed. If the job simulation is standardized with

sequential steps, clear instructions and measurable outcomes (e.g., time, quality, quantity), norms can be developed for statistical comparison of individual performances. Such a set of standardized job simulation tasks is referred to as a work sample, or a set of work samples.

The Materials Development Center at the University of Wisconsin-Stout operates a Work Sample Manual Clearinghouse and is a useful resource for developing local work samples with construction, standardization, and normative information already established. A variety of commercially manufactured work samples are also available. The addresses of the Materials Development Center and several commercial manufacturers are included in Appendix E.

A work sample may involve testing electrical circuits for continuity, building an aluminum ladder or assembling a lawn mower engine. Careful analysis of what is required to successfully complete such a task allows for detailed assessment of an individual's performance.

A work sample may also be designed to measure a trait or set of traits important to a variety of jobs. In this case the work sample may not resemble an actual job but may provide a first-hand opportunity to measure an ability such as eye-hand-foot coordination, fine dexterity, physical range of motion or numerical sorting.

Situational Assessment

This is another method for directly observing a person's performance in work-related activities. A situational assessment generally involves arranging a period of time (from two hours to two weeks) for the person to perform the duties of an actual job. The setting may be a school cafeteria or office, on a grounds maintenance crew, or at a computer center. Feedback from the work supervisor can provide insights for future planning, and systematic observation of behaviors exhibited on the job are also valuable.

Vocational Evaluation Center

Any or all of the above methods of assessment may be in use outside the realm of a vocational evaluation center. But they are likely to be well represented and utilized most frequently by a vocational evaluator. If a thorough assessment of an individual's skills and abilities is required, a vocational evaluation is often advised. The counselor's or other referring party's ability to identify areas of focus can reduce the time required in evaluation and maximize the usefulness of the information received from the vocational evaluation. Counselors and teachers should be familiar enough with the vocational evaluation center to know the nature and extent of evaluation available. Background information in the form of the six summary sheets for categories of assessment can provide important data to the evaluator, who might otherwise feel obliged to generate the same information independently.

Conversely, the vocational evaluator represents a resource who can provide accurate information for planning purposes to the student and counselor. An understanding of the constituents' needs is as important as a relatively sophisticated knowledge of tests and measurement theory. The vocational evaluator should also be aware of local academic, training and employment opportunities, as well as rehabilitation services and programs.

There are obviously many methods for gathering data on an individual's skills and abilities, as well as different ways to present the gathered information. The above techniques and following forms are possible options to be considered and adapted to each district's needs and available resources.

SKILLS AND ABILITIES PROFILE*

Student Name _____ Date _____

Staff Member _____

The following vocational/personal profile is to provide a concise summary of student's strengths and weaknesses. It can be used for prescriptive purposes to develop plans and programs for the student based on the information obtained during the assessment.

*KEY

Assets: Student's performance or behavior should contribute to the success of training and/or work experience (job placement).

Okay–No Change: Student's performance or behavior appears to be acceptable for most training or employment situations.

Change Needed: Student's performance or behavior appears to be such that it would be minimally acceptable for some jobs, but not others. Maximum employability may not occur unless change is made.

Liabilities: Student's performance or behavior appears to be unacceptable for most training and employment situations.

Not Applicable: Student's performance is not a significant *variable in training* and/or employment success.

When considering a student for academics, training or employment, variables rated in the change needed and liabilities sections should be examined carefully in relation to the actual requirements of the situation.

This form is adapted from a form developed by
Dean A. Petersen
Scottsdale Public Schools

SKILL/ABILITY	ASSETS	OKAY–NO CHANGE	CHANGE NEEDED	LIABILITIES	NOT APPLICABLE	COMMENTS/ RECOMMENDATIONS
1. Fine Finger Dexterity						
2. Gross Manual Dexterity						
3. Bi-manual Coordination						
4. Small Tool Usage						
5. Eye-Hand Coordination						
6. Size Discrimination						
7. Physical Endurance and Stamina						

SKILL/ABILITY	ASSETS	OKAY - NO CHANGE	CHANGE NEEDED	LIABILITIES	NOT APPLICABLE	COMMENTS/ RECOMMENDATIONS
8. Upper Extremity Range of Motion						
9. Basic Control (sorting/filing/bookkeeping)						
10. Color Discrimination						
11. Form Perception						
12. Space Perception						
13. Manual Assembly Skills						
14. Eye-Hand-Foot Coordination						
15. Money Handling						
16. Measurement						
17. Numerical Ability						
18. Lifting Strength						
19.						
20.						
21.						
22.						

PSYCHOMETRIC ASSESSMENT RESULTS:

RELATED CAREER CLUSTERS AND/OR SPECIFIC OCCUPATIONS:

NOTE: This form provides an example of a method for summarizing data about a student in a usable fashion. In certain situations and/or environments language modifications and additions/ deletions might be necessary.

SKILLS AND ABILITIES SUMMARY SHEET

Student Name _____ Date _____

Staff Member _____

A. Questions to be answered:

1. What are the student's current academic functional levels? _____

2. What skills and abilities has the student demonstrated through work experiences, hobbies, etc. . . . ? _____

3. Is information regarding the student's work skills and abilities adequate for planning purposes?

   Yes _____ No _____

4. What skills and abilities are the student's significant strengths? _____

5. What are his/her major weaknesses? _____

6. Does the student have an understanding of how his/her skills and abilities relate to the world of work? _____

If more information is needed, what methods can be used? _____

B. Strategies to improve/develop work skills and abilities:

Structured independent activities: _____

Extracurricular activities: _____

Work experience: _____

Courses: _____

Other: _____

C. Occupational Cluster(s) suggested: _____

_____

_____

_____

WORK HABITS

How a person interacts with other people and the environment directly affects employability. Therefore, identification of behavioral assets and liabilities is a necessary part of vocational assessment. Many behaviors found in a school setting are also significant in work settings. Length of attention span, punctuality, cooperation, neatness and independence are just a few. A variety of checklists and behavior rating scales have been developed for systematically recording work habits or behaviors, and a few suggested by Esser (1975) are included in this section. These scales/forms are provided as examples of what can be done to identify work-related behavioral strengths and limitations. Behavioral factors rated, scale(s) utilized and summary techniques have to be identified and developed to meet each district and school's needs.

It is important that scales such as these be completed on the basis of actual performance. A teacher is often in the best position to provide observation data because of frequent, regular contact with the student over several months. A vocational evaluator has the opportunity to observe the student in a simulated work setting, which often results in the observation of additional unique habits. Parents, employers and students themselves are additional sources of information concerning work habits.

The "team" nature of this entire assessment process is extremely important. It is of special significance in the area of work habits to obtain different perspectives of a student from different individuals who interact with and observe the student in a variety of settings. Sharing information will lead to forming the most accurate picture of a student and to developing the most realistic recommendations and individual plan.

PREVOCATIONAL ASSESSMENT QUESTIONNAIRE*

Student Name _____ Rater Name _____ Date _____

On the basis of your knowledge of the student, assess him/her on the following rating scale, placing a check in the appropriate box.

	X	X Applies	Inclined to X	Inter-mediate	Inclined to Y	Y Applies	Y	
1.	Student is quite comfortable and not anxious with supervision							Student is basically uncomfortable and anxious with supervision
2.	Student usually follows thru on instructions and applies them to work							Student usually fails to follow thru on instruction
3.	Student's work is done correctly and carefully							Student's work is not done correctly and carefully
4.	Student recognizes work as different from school, home, or recreation							Student does not recognize work as different from school, home, or recreation
5.	Student's productivity is consistently high							Student's productivity is consistently low
6.	Student spends time appropriately with co-workers							Student does not spend time appropriately with co-workers
7.	Student works well with others on joint tasks							Student has trouble working with others on joint tasks

X	X Applies	Inclined to X	Inter-mediate	Inclined to Y	Y Applies	Y
8. Student is appropriate in his personal relations with supervisors						Student is not appropriate in his personal relations with supervisors
9. Student accepts unpleasant tasks when assigned						Student strongly objects to unpleasant tasks
10. Student is open and clear in communicating with foreman						Student's communications with foreman are unclear
11. Student's work organization is good						Student's work organization is poor
12. Student is neat, alert, and involved						Student is sloppy, sluggish, and uninvolved

*This form adapted from Esser, Thomas J. (Ed.) *Client Rating Instruments For Use In Vocational Rehabilitation Agencies*, Materials Development Center, Stout Vocational Rehabilitation Institute, University of Wisconsin-Stout, Menomonie, WI, 1975, p. 20.

MDC BEHAVIOR IDENTIFICATION FORM*

Student Name _____ Date _____

Student's Job Goals _____

_____

Rater _____

Period Covered _____ to _____

Date of 1st Rating	2nd Rating	3rd Rating
_____	_____	_____

Rating Key

A - Acceptable
- A-1 Strength
- A-2 No Problems

B - Selective Placement
- B-1 Problem-Placement
- B-2 Change to Upgrade

C - Change Needed
- C-1 Change Possible
- C-2 Change Doubtful

Category	Behavior	Rating
1. Hygiene, Grooming and Dress		_____ _____ _____
2. Irritating Habits		_____ _____ _____
3. Odd or Inappropriate Behaviors		_____ _____ _____
4. Communication Skills as Related to Work Needs		_____ _____ _____
5. Attendance		_____ _____ _____
6. Punctuality		_____ _____ _____
7. Ability to Cope with Work Problems (Frustration Tolerance)		_____ _____ _____

Category	Behavior	Rating
8. Personal Compliance		
9. Vitality of Work Energy		
10. Stamina or 8-Hour Work Capacity		
11. Steadiness or Consistency of Work		

*This form adapted from Esser, T. J. (Ed.) *Client Rating Instruments For Use In Vocational Rehabilitation Agencies*, Materials Development Center, Stout Vocational Rehabilitation Institute, University of Wisconsin-Stout, 1975, p. 27.

WORK HABITS SUMMARY SHEET

Student Name _____ Date _____

Staff Member _____

A. Questions to be answered:

1. What behavioral characteristics does the student demonstrate that will be assets relative to his/her vocational interests? _____

2. What behavioral deficits, relative to his/her interests does the student exhibit? _____

3. Specific behavioral objectives: _____

B. Strategies for achieving objectives:

1. Counseling _____

2. Work adjustment _____

3. Other _____

INTERESTS

A person's interests are useful reference points for predicting job satisfaction and can provide direction for further career exploration. Therefore, identification of an individual's vocational interests is an appropriate part of the assessment process. Some of the benefits and expected outcomes to be derived are listed below. Interest assessment can:

1. Provide a comparison of expressed goals and tested interests.
2. Expand the individual's awareness of career opportunities related to given interest areas.
3. Aid the student in developing realistic vocational goals related to expressed and/or tested interests.
4. Provide additional data to consider in plan development.

Structured Interview Format

A structured interview with the student can help determine how well these interests have been developed to date. Some basic items that should be considered pertain to the student's past and present activities, jobs, hobbies and preferred courses. A sample Structured Interview Questionnaire follows in this section of the guide. The counselor can fill out such a questionnaire with the student or have the student fill it out before the interview.

Some of this information might have been previously gathered through assessment or other strategies. The involved professional must exercise his/her judgment and expertise in determining topics to be covered and interviewing method(s) to be utilized.

Interest Inventories

Commercially available interest surveys are often effective in delineating a person's interests, even when the person has difficulty verbalizing likes and dislikes. A wide range of these surveys, appropriate for various segments of the population, is on the market. A partial list is provided in Appendix D. A few of these are described below to acquaint the reader with the types of tests available.

AAMD-Becker Reading-Free Vocational Interest Inventory

As the name implies, this is a picture interest survey requiring no reading. It is designed and normed for high school age students in the trainable and educable range of mental retardation. The unambiguous pictures depicting people doing entry-level jobs has made this survey useful for other special populations as well, such as low-language deaf students. Approximate administration time is 30 minutes. Hand-scoring takes approximately ten minutes.

Career Assessment Inventory (CAI)

This survey is comprised of questions that require the student to indicate the degree of like or dislike for a wide range of occupations, activities and school subjects. A computer printout provides a profile of 22 basic interest areas, and the degree of similarity between the person's responses and the response patterns of men and women employed in a wide range of occupations. Measures of academic orientation and introversion/extroversion are also provided. Jobs requiring at least a high school diploma, but not more than a bachelor's degree, are well-represented on this survey. Approximate administration time is one hour. The CAI is generally mailed away for computer-scoring, and total time to receive the profile is approximately ten days.

Self-Directed Search

Two versions of this survey are available, representing different reading levels. Form E is written at approximately the 3.5 grade level, and also assumes less vocationally related experience than the Standard Form, written at approximately the sixth grade level. It is designed to be scored by the respondent, who then looks in an Occupational Finder (included) to learn which jobs are suggested by his/her interest patterns. Approximate administration time is one hour.

Strong-Campbell Interest Inventory (SCII)

Items included on this survey concern occupations, work activities, hobbies, amusements, school subjects and types of people. A like/dislike response is recorded for each item. The resulting computer printout reflects 23 basic interest areas, and the degree of similarity between the person's responses and the response patterns of men and women employed in a wide range of occupations. Jobs that require education at the bachelor's degree level or higher are well represented on this survey. Measures of academic orientation and introversion/extroversion are also provided. Approximate administration time is one hour. The SCII is computer-scored, and about ten days should be allowed for receipt of the profile from the computer-scoring service.

Wide Range Interest Opinion Test (WRIOT)

The WRIOT was designed to cover a broad assortment of work and leisure activities. People are portrayed in pictures and reading is not a factor. Activities include work from unskilled labor through technical occupations to professional and managerial positions. Supplementary scales on the profile include measures of sedentariness, risk and interest "spread," or degree of interest development. Approximate administration time is one hour. Hand-scoring takes approximately 15 minutes.

Vocational Exploration

Once a preliminary assessment of an individual's interests has been made, additional attention may be given to further developing occupational interests. Korn, in Dunn, et al. (1976), indicated that hands-on vocational exploration materials are useful in promoting additional student occupational exploration, especially when the task performed was a problem-solving experience that would typically be encountered in a job setting (p. 21). Such exploration can be accomplished in a vocational education classroom, shop or laboratory, in an actual job setting, or in a vocational evaluation center. These actual work-related experiences are often the most effective way to learn about jobs.

A vocational education course is an excellent introduction to new careers. Enough time is generally allowed within a school curriculum to learn relevant information and apply it in problem-solving situations. Such a setting can encourage class discussions about the types of jobs available that are related to the subject matter of the course, and what the entry requirements are.

Actual work experience provides firsthand knowledge of an occupation. This opportunity may be available through a cooperative education program or extracurricular work activity. Short-term situational assessment may sometimes be arranged by the student's counselor or vocational evaluator.

Vocational evaluation offers the student an opportunity to explore a variety of work-related activities in a relatively short period of time. Hands-on, simulated work tasks are utilized, frequently in the form of standardized work samples. Simulated work stations can provide exposure to specific jobs, such as mechanic, baker, clerk or electronics technician. A work sample may also provide such direct exposure to specific jobs or be limited work tasks common to a variety of jobs, such as tool usage, measuring and sorting. Performance on a standardized work sample, in addition to providing exposure to the task, can also provide a score that can be compared to the scores of others.

INTEREST INTERVIEW QUESTIONNAIRE

Student Name _____ Date _____

Age _____ Grade _____

1. What does your father do in his job? _____

   _____ Mother? _____

   Brothers/Sisters? _____

2. Do you have any hobbies? _____
3. Which is your favorite hobby? _____
4. What kinds of jobs can you think of that are related to your favorite hobby? _____

   _____
5. What kinds of jobs/activities do you do around home? _____

   _____
6. What do you like best about school? _____
7. What are your favorite subjects? _____
8. What courses would you like to try that you haven't taken yet? _____

   _____
9. What kinds of jobs are related to the school subjects you named above? _____

   _____
10. Explain the jobs that you have held in the past. _____

    _____
11. Which was your favorite job? _____
12. What did you like most about your favorite job? _____
13. What did you like least about the same job? _____
14. What other kinds of jobs are related to the work you have done? _____

    _____

15. What other activities are important to you? Do you belong to any special clubs, church groups, or extracurricular activities? _____

_____

16. What kinds of jobs are related to these activities? _____

17. Of all the jobs you have thought about doing, which job would you like to do most? _____

_____

18. Which school courses might be helpful in preparing you for the jobs you like most? _____

_____

19. What kind of training is required for the job that you would like to do after finishing high school? _____

*The numbered questions above in no way represent a desired order of presentation nor do they presume coverage of all relevant topic/content areas.

INTEREST SUMMARY SHEET

_____ _____
Student Name Date

_____
Staff Member

A. Questions to be answered:

1. Does the student express realistic, well-developed career goals? (check one)

_____ No _____ Yes, student's goals are: _____

_____

2. What are the student's vocational likes and dislikes?* Expressed: _____

_____ Manifested (observed): _____

Tested (instrument used _____): _____

3. What are the student's hobbies? _____

4. Work experience to date (paid or volunteer):

Position	Duration	Likes	Dislikes
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

B. Strategies for further development of interests/goals:

Vocational classes _____

Vocational evaluation _____

Work experience program _____

Other _____

C. Occupational Cluster(s) suggested: _____

_____

*In general, more credence should be placed on expressed and manifested interests than on tested interests.

DAILY LIVING SKILLS

Employment and functional independence can only be achieved with a base of independent living skills. Therefore, the presence of these skills needs to be determined. Often referred to as daily living skills or prevocational skills, they need to be developed along with vocational skills, and strategies devised for accommodating limitations when necessary.

The area of **personal care** can generally be assessed through an interview with the student and parents. Independence and adequate attention to grooming, hygiene and nutrition are of primary concern. When information is required for detailed program planning in this area, a questionnaire, such as the AAMD Adaptive Behavior Rating Scale, or the Independent Living Evaluation–Training Program from the Rehabilitation Research and Training Center at the University of Wisconsin-Stout, is recommended. These provide specific questions and strategies for determining an individual's functional level over the range of personal care activities. Any program to assist the development of personal care independence must effectively involve parents and other family members. They are usually in the best position to deal constructively with the issues and help the student achieve independence and responsibility in these skill areas.

Home/life management is a second category of independent living skills. Many schools now regularly address such functional skills as budgeting, banking and consumer economics. Assessment of these skills, and subsequent programming to provide their acquisition if necessary, is an important service to many students.

Job readiness skills are also included under independent living skills. These include job seeking strategies, completing employment applications and job interviewing techniques. Any of these might be addressed individually or as group or classroom activities.

Transportation to and from work is often a major concern, especially for the disadvantaged. Learning to use public transportation independently can be a significant hurdle in prevocational skill development, and once again the cooperation of parents and family is critical. Understanding bus schedules and maps, following directions and reading road signs are additional concerns. Simulated problems in the classroom and field trips throughout the community can help prepare the students for functional independence in the area of transportation. Accurate assessment can identify this as an issue to be addressed as part of the IVEP.

The above four skill areas might not be an issue with every student and therefore would not have to be comprehensively assessed. Based on available information, the involved professional must decide if an area has direct vocational significance to a specific student's personal/career growth and development.

The following **Job Survival Skills–Criterion Checklist** was developed by home economics teachers and special education teachers as part of a Vocational Education Special Needs Workshop held in June 1978 at Glendale Union High School District. The checklist was developed for instructional purposes in the area of daily living skills at the prevocational level for special needs students. It is provided in this guide as an example of a summary profile approach that can be used as an assessment device and/or to help teachers in identifying areas to be targeted for a particular student.

The competencies identified were intended to be used jointly by home economics teachers and special education teachers as a basis for designing instructional tasks for student learning over an extended period of time. The checklist can be used by counselors and vocational evaluators in determining areas of strengths and weaknesses to be considered in vocational decision making. As has been mentioned previously, districts/schools are encouraged to modify this form in any way and to develop a checklist or method appropriate to their individual needs, student population(s) and environment.

JOB SURVIVAL SKILLS
CRITERION CHECK LIST

Developed by Glendale Union High School District

COMPETENCIES	NOT DONE AT ALL	DONE WELL	MODIFICATIONS NEEDED	COMMENTS
Area: Knowledge of Getting a Job				
A. Job Services				
1. Department of Economic Security				
2. Employment Offices				
3. Knowledge of possible employment in area				
4. Reading the Want Ads				
a. locating ad in paper				
b. selecting suitable ad				
c. interprets job vocabulary				
B. Making Initial Contact				
1. Uses telephone correctly				
2. Can locate job site				
3. Introduces self properly				
4. Contacts personnel manager				
C. Job Applications				
1. Has social security card				
2. Has pen available				
3. Knows references				
4. Knows how to fill in properly				
5. Knows address and telephone number				
6. Knows how to fill in W4 form				
7. Understands vocabulary				
8. Writes neatly				
D. Job Interview				
1. Proper dress				
2. Proper grooming				
3. Knows how to present self				
a. good eye contact				
b. good posture				
c. speaks clearly				
d. proper manners				

COMPETENCIES	NOT DONE AT ALL	DONE WELL	MODIFICATIONS NEEDED	COMMENTS
E. Job Requirements				
1. Aware of skills required				
2. Aware of own strengths				
3. Aware of own weaknesses				
4. Has work experience				
F. Aware of Resources for Assistance				
1. D.V.R.				
2. Area School Skill Center				
3. Goodwill Industries				
4. ASU Job Service				
5. CETA - META				
6. Coop Programs in High School				
Area: Job Survival Skills				
A. Attendance--calls into work when absent or late				
B. On time				
C. Starts work immediately				
D. Check in procedures				
E. Proper use of time on job				
F. Time and length of breaks according to rules				
G. Time and length of lunch according to rules				
H. Knowledge of what to do on job (use of telephone)				
I. Follows directions				
J. Completes assigned job				
K. Knows how to deal with interruptions				
L. Knows where facilities are--parking, eating areas, restrooms				
M. Understands company rules and policies--reads company handbooks				

COMPETENCIES	NOT DONE AT ALL	DONE WELL	MODIFICATIONS NEEDED	COMMENTS
Area: Interpersonal Relations				
Self-Control				
A. Temper				
B. Physical				
C. Verbal				
D. Shows respect to employer and co-workers				
E. Accepts criticism				
F. Can express feelings and needs				
G. Manners				
1. Proper eating habits				
2. Common politeness and courtesies (e.g., thank you, please, excuse me)				
H. Job related social obligations				
1. Thank you notes				
2. R.S.V.P.				
Area: Grooming, Clothing, Hygiene, and Health Habits				
A. Clothing: Care and Selection				
1. Chooses appropriate clothing				
a. for build				
b. for style				
c. for occasion				
d. for age				
2. Neat, clean clothing each day				
3. Maintains clothing well				
4. Appropriate footwear				
5. Clean, well-kept footwear				
B. Health Habits				
1. Proper weight for height and build				
2. Skin clear				
3. Hair healthy				
4. Has basic nutritional knowledge				

COMPETENCIES	NOT DONE AT ALL	DONE WELL	MODIFICATIONS NEEDED	COMMENTS
5. Gets daily exercise				
6. Posture good				
7. Suitable walking gait				
8. No unusual body movements				
9. No nervous habits				
C. Hygiene and Grooming				
1. Brushes teeth daily				
2. Keeps hands clean				
3. Always washes hands before meals				
4. Takes daily shower or bath				
5. Uses deodorant daily				
6. Shaves regularly				
7. Clean, trimmed nails on fingers and toes				
8. Makeup appropriate and fresh				
9. Hair care:				
a. cut or styled appropriately				
b. washed as needed				
c. kept neatly combed				
d. combed in private				
Area: Decision-Making Skills and Money Management				
A. Can state personal goals				
B. Knows consequences of actions				
C. Is responsible for own actions				
D. Can prepare and maintain a budget				
E. Can explain payroll deductions				
F. Can keep financial records				
Area: Work Ethics				
A. Honesty shown				
1. To employer				
2. With other employees				
3. Knows consequences of stealing				
a. taking items home				
b. using items at work (food, comestics without buying)				

COMPETENCIES	NOT DONE AT ALL	DONE WELL	MODIFICATIONS NEEDED	COMMENTS
B. Loyalty				
1. Respects employer's business				
a. calling in only when necessary				
b. aware of and follows company policies				
C. Communicating work-related problems				
1. How to complain				
2. Who to complain to				
D. Functioning to fullest capacity				
1. Consequences of use of alcohol, drugs				
E. Knows rules				
1. Ability to follow rules (i.e., gum chewing, smoking, uniform clean and complete)				
Area: Transportation				
A. Obtains a valid driver's license				
B. Able to maintain vehicle				
1. Gas				
2. Oil				
3. Tires				
4. Water				
5. Battery				
C. Knows different sources of transportation available				
1. Dial-a-Ride				
2. Car pool				
3. Walk				
4. Bicycle				
5. Bus (obtain schedule)				
6. Taxi				
7. Hitchhiking (dangers of)				
8. Motorcycle				
D. Parking				
1. Designated spot for your job				
2. General rules				

DAILY LIVING SKILLS SUMMARY SHEET

Student Name _____ Date _____

Staff Member _____

A. Questions to be answered:

1. Identify deficits in the area of personal care:

   Grooming: _____

   Hygiene: _____

   Nutrition: _____

   Other: _____

2. Deficits in area of home/life management:

   Money management: _____

   Civic responsibilities: _____

   Housekeeping: _____

   Others: _____

3. What is the student's functional level regarding job readiness skills?

   Job seeking skills: _____

   Transportation use: _____

   Other: _____

B. Strategies to improve daily living skills:

Classroom instruction: _____

Individual counseling: _____

Referral to community agency: _____

Family involvement: _____

Other: _____

VOCATIONAL ASSESSMENT SUMMARY AND PLAN DEVELOPMENT

This section is designed to help summarize the information gathered in the six assessment categories. A summary form identifies specific objectives used in developing a student IVEP and allows for recommendations to be readily shared with students, parents and/or other professionals. Two styles of summarizing data are included here. The first is a modified checklist. Its main advantage is brevity. It is designed to provide critical information clearly and concisely. It may be used as a reporting format by itself or in conjunction with a narrative report. Its chief disadvantage is that alone it may not impart adequate information for plan development and vocational counseling purposes.

The second format provided in this section organizes assessment data into short statements. These refer to brief summaries of results within each assessment category, specific plan statements and objectives to be achieved as a result of implementing the plan statement. An advantage of this summary style is that an IVEP can be developed directly from these plan and objective statements. This format may take somewhat longer to complete than the modified checklist. These two represent alternative methods of data presentation and can be combined or modified to be useful in a variety of settings. Adaptations of language and other areas might be necessary.

It must be stressed again, the purpose of information gathering is to develop the IVEP. The summary sheets in the six assessment categories identify directions for the individual student. Once directions are determined, academic and vocational course selection can be improved and support services delineated. This data has to be written into a plan that is specific, concise and easily understood. The IVEP must be reviewed and/or modified on a regular and on an "as needed" basis.

Three sample formats for the IVEP, which have worked in some environments, are provided at the end of this section. They can be used as a basis for developing a format suitable to your district and/or school.

STUDENT PROFILE AND SUMMARY

Student Name _____ Date _____

Staff Member _____

The following vocational/personal profile is to provide a concise summary of student's strengths and weaknesses. It can be used for prescriptive purposes to develop plans and programs for the student based on the information obtained during the assessment.

*KEY

Assets: Student's performance or behavior should contribute to the success of training and/or work experience (job placement).

Okay–No Change: Student's performance or behavior appears to be acceptable for most training or employment situations.

Change Needed: Student's performance or behavior appears to be such that it would be minimally acceptable for some jobs, but not others. Maximum employability may not occur unless change is made.

Liabilities: Student's performance or behavior appears to be unacceptable for most training and employment situations.

Not Applicable: Student's performance is not a significant *variable in training* and/or employment success.

When considering a student for academics, training or employment, variables rated in the change needed and liabilities sections should be examined carefully in relation to the actual requirements of the situation.

	ASSETS	OKAY–NO CHANGE	CHANGE NEEDED	LIABILITIES	NOT APPLICABLE	TARGETED OBJECTIVES
JOB AWARENESS						
1. Aware of Range of Occupations						
2. Understands Job Requirements						
3. Aware of Specific Duties of Job						
4.						
NEEDS						
1. Physical						
2. Emotional						

	ASSETS	OKAY – NO CHANGE	CHANGE NEEDED	LIABILITIES	NOT APPLICABLE	TARGETED OBJECTIVES
3. Cultural						
4.						
SKILLS AND ABILITIES						
1. Vocational						
2. Academic						
3. Physical						
4.						
WORK HABITS						
1. Responsible						
2. Interacts Appropriately						
3. Works Independently						
4.						
INTERESTS						
1. Likes and Dislikes Well-Defined						
2. Identified Vocational Goals						
3. Verified by Experience						
4.						
DAILY LIVING SKILLS						
1. Personal Care						
2. Home/Life Management						
3. Job Readiness Skills						
4.						

RECOMMENDATIONS:

Short-Term: _____

Long-Term: _____

Occupational Cluster(s) Indicated: _____

VOCATIONAL ASSESSMENT SUMMARY

Student Name _____ Date _____

School _____ Counselor/Evaluator _____

Job Awareness:

1. Level of understanding student demonstrates about the world of work: _____

2. Occupational clusters most familiar to student: _____

*3. Plan for increasing job awareness: _____

4. Targeted objective(s) of this plan: _____

Needs:

1. Special needs related to school activities: _____

2. Needs/concerns about employment: _____

3. Occupational cluster(s) suited to student's needs: _____

*4. Plan for reconciling needs with vocational program: _____

5. Targeted objective(s): _____

Skills and Abilities:

1. Clearly identified vocational strengths: _____

2. Best school subjects: _____

3. Other demonstrated assets: _____

4. Clearly identified areas of weakness: _____

_____

5. Occupational cluster(s) suggested: _____

*6. Plan for maximizing assets: _____

7. Plan for remediating deficits: _____

8. Targeted objectives for these plan statements: _____

_____

Work Habits:

1. Behaviors that will be assets for the student in a work setting: _____

_____

2. Problem behaviors: _____

3. Occupational cluster(s) suggested: _____

*4. Plan for enhancing work habits: _____

5. Targeted objective(s): _____

_____

Interests:

1. Current likes and dislikes: _____

2. Long-range career goals: _____

3. Occupational cluster(s) suggested: _____

*4. Plan for further interest development: _____

5. Targeted objective(s) of this plan: _____

_____

Daily Living Skills:

1. Problems associated with personal care: _____

*2. Plan for resolving personal care problems: _____

_____

3. Functional level of home/life management skills: _____

_____

*4. Plan for improving these skills: _____

5. Adequacy of job readiness skills: _____

*6. Plan for improving job readiness skills: _____

_____

7. Targeted objectives of these plan statements: _____

_____

Summary of primary recommendations:

Secondary recommendations:

*(Individual plan statements can be incorporated directly into IVEP)

_____ _____ _____

Counselor/Evaluator (Signature) Date

INDIVIDUAL VOCATIONAL EDUCATION PLAN

Student Name _____ Date _____

Occupational Cluster(s) Indicated:

_____

Short-Term Objectives: _____

Long-Term Objectives: _____

PLANNING AREA / GRADE	7 Date Revised	8 Date Revised	9 Date Revised
ACADEMIC			
VOCATIONAL			
ASUCPTPIOVRITIVESE			

Revision Agreement:

Counselor

Parent/Guardian

PLANNING AREA / GRADE	10 Date Revised	11 Date Revised	12 Date Revised
ACADEMIC			
VOCATIONAL			
SUPPORTIVE ACTIVITIES			

Revision Agreement:

Counselor

Parent/Guardian

61

INDIVIDUAL VOCATIONAL EDUCATION PLAN COMPONENT (I.V.E.P.) **Confidential Information**

Student's Name _____ Age ____ Sex ____ Home School _____ Diagnostic Category _____

I. Write a short paragraph about the student's handicapping condition.

I.a. Attach Vocational Assessment data to this form.

II. Present grade levels of educational functioning:

A. Reading:
1. Vocabulary _____
2. Comprehension _____
3. Listening _____

Math:
Grade level _____

III. What vocational program is recommended by the Pupil Evaluation Team:

IV. *Explanation of this vocational program as the "least restrictive environment".* (List reasons why this is the most appropriate program for this student.)

V. *Vocational Goals* (Long term objectives for this student.)

VI. *Short Term Objectives*

Objectives	*Method of Evaluation*	*Date*

VII. *List Special Education and related services to be offered at the vocational school.*

VIII. *Describe what modification and adaptations of instructional equipment are needed.*

IX. *To what extent will the student be able to participate in regular vocational classes.*

X. *Vocational Services*

A. Date for commencing services _____

B. Length of time of services _____

XI. Vocational School Staff members responsible for Program Implementation and Evaluation:

Teacher _____
Coordinator _____
Program Director _____
Student _____
Other _____

XII. Date of last IVEP review.

____ ____ ____
mo. da. yr.

Format Developed by Maine Bureau of Vocational Education **Exhibit "B"**

INDIVIDUAL VOCATIONAL EDUCATION PROGRAM (IVEP)

Student's Name _____ Vocational Program _____

Annual Goal(s):

_____

_____

_____

OBJECTIVES	EVALUATION METHOD	ACTIVITIES/MODIFICATIONS	DATE TO BE COMPLETED	PERSON RESPONSIBLE	MONITORING

Format Developed by New Hampshire Division of Vocational-Technical Education

NOTES:

Student's Strengths:

Limitations:

Teacher _____

Administration _____

Program Coordinator _____

Date: _____

APPENDIXES

A Occupations by Cluster

B Glossary of Terms

C Student Assessment and Planning Process

D Tests and Publishers

E Commercial Work Sample Manufacturers

F Resources for Occupational Information

G References and Selected Bibliography

OCCUPATIONS BY CLUSTER

Several classification systems have been developed that attempt to categorize various jobs into career clusters or families. Such systems are available through the Department of Education (USOE) and the Department of Labor, which has produced the *Dictionary of Occupational Titles* (DOT) and the *Occupational Outlook Handbook* (OOH). The following are the career clusters in each of these three classification systems.

Office of Education (USOE)	Dictionary of Occupational Titles (DOT)	Occupational Outlook Handbook (OOH)
Business & Office	Professional, Technical & Managerial Occupations	Industrial Production & Related Occupations
Marketing & Distribution	Clerical & Sales Occupations	Office Occupations
Communications & Media	Service Occupations	Service Occupations
Construction	Agricultural, Fishery, Forestry, & Related Occupations	Education and Related Occupations
Manufacturing	Processing Occupations	Sales Occupations
Transportation	Machine Trades Occupations	Construction Occupations
Agri-Business & Natural Resources	Benchwork Occupations	Occupations in Transportation Activities
Marine Science	Structural Work Occupations	Scientific & Technical Occupations
Environmental Control	Miscellaneous Occupations	Mechanics & Repairers
Public Services		Health Occupations
Health		Social Scientists
Hospitality & Recreation		Social Services
Personal Services		Performing Arts, Design & Communication Occupations
Fine Arts & Humanities		
Consumer & Homemaking		

In each of the above systems, the individual career clusters are broken down and listed with specific related occupations identified by job title. For example, in the *Dictionary of Occupational Titles* (DOT) each job title is identified by a code number, with each digit representing some identifying characteristic of that particular job. It is not the intention of this guide to present a comprehensive discussion of job classification and occupational information. Such areas are excellent topics and content subjects for district in-services and technical assistance programs through the State Department of Education.

To provide a more complete example, the nine occupational clusters from the DOT and examples of associated job titles are listed below. The list is by no means comprehensive, but presents some typical occupations/jobs in each group. For more information, please refer to the individual publications or the resources listed in Appendix F, Resources for Occupational Information.

Occupational Clusters and Associated Job Titles

Professional, Technical, and Managerial Occupations

Title	D.O.T. Number
Architect, Landscape	001.061-018
Accountant	160.167-010
Credit Analyst	191.267-014
Executive Secretary	189.117-010
Programmer, Information System	020.187-010
Retail Store Manager	185.167-046
Studio Technician	194.262-018
Building Inspector	168.267-010
Drafter	001.261-010
Casework, Child Welfare	195.107-014

Clerical and Sales Occupations

Title	D.O.T. Number
Addresser	209.587-101
Bookkeeper	210.381-014
Calculating Machine Operator	216.482-022
Clerk, File	206.362-010
Clerk, Post Office	243.367-014
Clerk, Typist	203.362-010
Computer Operator	213.362-010
Keypunch Operator	203.582-030
Sales Agent, Insurance	250.257-010
Sales Agent, Real Estate	250.357-018

Service Occupations

Airplane Flight Attendant	352.367-010
Guide, Travel	353.167-010
Barber	330.371-010
Cook	315.361-010
Cosmetologist	332.271-010
Hospital Attendant	355.674-014
Janitor	382.664-010
Laundry Worker	361.684-014
Waitress/Waiter	311.477-026
Firefighter	373.364-010

Agricultural, Fishery, Forestry, and Related Occupations

Beekeeper	413.161-010
Farmer	421.161-010
Forest Worker	452.687-010
Groundskeeper	406.684-014
Nursery Laborer	405.687-014
Rancher, Livestock	410.161-018
Veterinary Hospital Attendant	410.674-010
Fish Hatchery Worker	446.684-010
Horseshoer	418.381-010
Tree Surgeon	408.181-010

Processing Occupations

Baker	526.381-010
Sandblaster	503.687-010
Refinery Operator	549.260-010
Furnace Operator	512.362-018
Laborer	579.665-014
Mixer	550.685-078
Plater (Electroplater)	500.380-010
Sorting Machine Operator	521.685-318

Machine Trade Occupations

Title	D.O.T. Number
Blacksmith	610.381-010
Dyemaker	601.281-010
Drill-Press Operator	606.682-014
Machinist	600.280-022
Maintenance-Mechanic Helper	638.684-018
Mechanic, Automobile	620.261-010
Metal Fabricator	619.360-014
Forging Press Operator	611.482-010
Linotype Operator	650.582-010
Mechanic, Refrigeration	637.261-026

Benchwork Occupations

Assembler, Electronics	726.684-018
Buffer	705.684-014
Furniture Finisher	763.381-010
Furniture Upholsterer	780.381-018
Inspector	710.381-034
Jeweler	700.281-030
Repairer, Appliance	723.584-010
Sewing Machine Operator	787.682-046
Locksmith	709.281-101

Structural Work Occupations

Bricklayer	861.381-018
Carpenter	860.381-022
Carpet Layer	864.381-010
Construction Worker	869.664-014
Dry-Wall Applicator	842.681-010
Electrician	824.261-010
Engineer, Operating	859.683-010
Mason, Cement	844.364-010
Painter	840.381-010
Plumber	862.361-018

Miscellaneous Occupations

Truck-Crane Operator	921.663-062
Gas Dispatcher	953.167-010
Film Editor	962.264-010
Projectionist, Motion Picture	960.362-010
Sewage, Disposal Worker	955.687-010
Wastewater-Treatment Plant Attendant	955.585-010
Photograph Finisher	976.487-010
Bookbinder	977.381-010
Photoengraver	971.381-027
Printer, Screen	979.684-034

To most effectively use such classification systems in student planning, one must first develop a comprehensive picture of a student's interests, skills, abilities, etc. From this point, exploration of various occupational clusters will allow a counselor to help the student initially identify general families of possible appropriate career alternatives. Next, associated jobs in these families and their requirements and other characteristics can be compared to the student profile previously developed, allowing the counselor and student to narrow down and delineate some suitable and realistic occupational options. This process is not meant to "pigeon-hole" or eliminate possible jobs, but merely to provide a logical, sequential method for exploration of self and the world of work.

GLOSSARY OF TERMS

The following terms are the commonly found words and phrases specific to the fields of education and rehabilitation as defined for the purposes of this procedural guide. Definitions for education terms were drawn directly from the *Federal Register* and pertinent *Arizona Revised Statutes 15-1051.0.* Rehabilitation definitions were developed specifically for this guide with the help of references cited in Appendix F, most notably the *Vocational Evaluation Project Final Report.*

Abstract Reasoning - Nonverbal problem solving.

Achievement Test - A test designed to measure the amount of knowledge or skill a person has acquired, usually as a result of instruction.

ACT - means the Vocational Education Act of 1963, P.L. 88-210, as amended by Title II of the Education Amendments of 1976, P.L. 94-482.

Adjustment Programs - Such programs are identified by emphasis, such as work adjustment, personal adjustment or social adjustment. They are characterized by the objective of changing and improving behavior (through training or therapeutic techniques) in order to make an individual more employable.

Adult Program - Vocational education for persons who have already entered the labor market or who are unemployed or who have completed or left high school and who are not described in the definition of "postsecondary program."

Agricultural Education - Vocational agriculture *preparation* level courses include those at the 9th through 12th grades that develop specialized skills in occupations within the field of agriculture and that meet state program standards. Teacher must be vocationally certified in agriculture.

Ancillary Services - Activities that contribute to enhancing the quality of vocational education programs, including activities such as teacher training and curriculum development, but excluding administration (except in consumer and homemaking education under Section 150 of the Act).

Aptitude - Also referred to as "potential." It is the capacity to acquire proficiency in an area, after maturation or a given amount of formal or informal training.

Behavior Modification - A structured procedure that utilizes behavioral principles such as positive reinforcement to alter a target behavior for the benefit of the individual.

Behavior Observation - The process of objectively identifying and recording (in terms of frequency, intensity and duration) behaviors that may be an asset or hinderance to vocational adjustment.

Bilingual Vocational Training - Training or retraining in which instruction is presented in both the English language and the dominant language of the persons receiving training. The training is conducted as part of a program designed to prepare individuals of limited English-speaking ability for gainful employment as semiskilled or skilled workers or technicians or sub-professionals in recognized occupations and in new and emerging occupations. It excludes any program to prepare individuals for employment in occupations that require a baccalaureate or advanced degree. Bilingual vocational training includes: guidance and counseling (either individually or through group instruction) in connection with such training or for the purpose of facilitating occupational choices; instruction related to the occupation or occupations for which the students are in training or instruction necessary for students to benefit from such training; the training of persons engaged as, or preparing to become, instructors in a bilingual vocational training program; and the acquisition, maintenance, and repair of instructional supplies, aids, and equipment. It does not include the construction, acquisition, or initial equipment of buildings or the acquisition or rental of land.

Business and Office Education - Vocational business and office preparation education courses offered at the 10th, 11th, and 12th grades provide entry-level competencies emphasizing specialized office occupations, general office occupations, bookkeeping/accounting occupations, computer and related occupations. Teachers must be vocationally certified in business and office education.

Career Exploration - A process to expose an individual to work experience and occupational information that will increase his knowledge of the world of work and provide feedback to the evaluators on which they can make judgments.

Competitive Employment - Employment held by a worker in which his performance conforms to the established standards within the plant, business or industry.

Cooperative Education - A program of vocational education for persons who, through written cooperative arrangements between the school and employers, receive instruction, including required academic courses and related vocational instruction, by alternation of study in school with a job in any occupational field. These two experiences must be planned and supervised by the school and employers so that each contributes to the student's education and to his or her employability. Work periods and school attendance may be on alternative half days, full days, weeks, or other periods of time in fulfilling the cooperative program.

Daily Living Skills - Also referred to as "prevocational skills." These are basic capabilities (such as grooming and using a public transportation system) that are usually considered prerequisites to employment.

Data-People-Things - This concept is based on the premise that each job requires a worker to function in relation to data-people-things in varying degrees. The code (identified by the last three digits of the *Dictionary of Occupational Titles* code) ranges from 0 - 8, with "0" indicating maximum relationship and "8" indicating no significant relationship.

Dictionary of Occupational Titles - A standard source of occupational information about more than 21,000 occupations. Volume I contains the codes, definitions, and the jobs alphabetically arranged by job titles. Volume II contains industrial classification of the jobs listed in Volume I, definition of worker functions, and discussion of worker traits, training time, physical demands and working conditions.

Disability - A condition of impairment, physical or mental, having an objective aspect that can usually be described by a physician.

Eligibility - (for Vocational Rehabilitation Services) - Certification that an individual: 1) has a physical or mental disability, 2) has a substantial handicap to employment, and 3) can be expected to improve in functional independence through vocational rehabilitation services.

Employer Contacts - Employers within the community who have been contacted by facility personnel as prospective job placement possibilities for handicapped or disadvantaged individuals.

Environmental Manipulation - The act of altering external conditions (e.g. increasing noise in a work area) to observe resulting stability or change in work behavior.

Eye-Hand Coordination - The ability to coordinate movements of the eyes and hands rapidly and accurately.

Fine Finger Dexterity - The ability to use the fingers to manipulate small objects or tools that require fine tolerances of standards.

Functional Independence - The capacity to take care of one's own affairs to the extent that physical, mental, emotional, or economic conditions permit.

Gainful Occupation - Employment in the competitive labor market, practice of a profession, farm or family work, sheltered employment, home industries or other homebound work.

Handicapped - A) a person who is: 1) mentally retarded; 2) hard of hearing; 3) deaf; 4) speech impaired; 5) visually handicapped; 6) seriously emotionally disturbed; 7) orthopedically impaired; or 8) has other health impairments, or specific learning disabilities; and B) a person who, for the above reasons: 1) requires special education and related services, 2) cannot succeed in the regular vocational education program without special educational assistance, or 3) requires a modified vocational education program.

Health Occupations Education - Health occupations *preparation* education is composed of skill-based courses at the 10th, 11th and 12th grades that combine classroom instruction with supervised on-the-job experiences leading to an entry-level health care job. Teacher must be vocationally certified in health occupations.

High School Program - Vocational education for persons in grades 9 through 12.

Individualized Educational Plan (IEP) - A written plan, drawn up by persons involved with the education of a handicapped student in a public school (including the parents and student, if appropriate), that outlines short and long-term educational goals to be met by that student. The methods for achieving those goals are also stated. This plan is reviewed at various intervals and modified accordingly.

Individualized Written Rehabilitation Plan (IWRP) - A written plan, drawn up jointly by the vocational rehabilitation counselor and a client (whose eligibility has been established), that outlines: 1) the client's vocational goal; 2) services to be coordinated by the Department of Vocational Rehabilitation (counseling, physical/mental restoration, training, payment of related expenses); 3) any additional program goals; and 4) the client's responsibilities in the execution of the plan. This plan is reviewed at various intervals and modified accordingly.

Industrial Arts Education Programs - Education programs: 1) that pertain to the body of related subject matter or courses, organized to develop understanding about all aspects of industry and technology, including learning experiences involving activities such as experimenting, designing, constructing, evaluating, and using tools, machines, materials, and processes; and 2) that assist individuals in making informed and meaningful occupational choices or prepare them for entry into advanced trade and industrial or technical education programs.

Industrial Standards - Actual worker requirements from industry based on the expectations of the employer.

Interest Inventory - An instrument that compares an individual's interests in various activities to those of persons successfully engaged in a variety of occupations. The assumption is that the more closely one's interests match those of successful persons in a given occupation, the more likely one will find satisfaction in that occupation.

Job Analysis - The systematic study of a job including: what the worker does in relation to data-people-things; the methodology and techniques employed; the machines, tools, equipment and work aids used; the materials, products, subject matter or services that result; and the traits required of the worker.

Job Clusters (Work or Job Families) - Related occupations grouped on the basis of similar job requirements, such as specific duties of the job, materials and equipment used, and skill, knowledge and worker characteristics required.

Job Placement - A procedure enabling individuals to be "placed" in the labor market, i.e. become employed. This requires knowledge of job requirements, the labor market, and an individual's abilities and limitations.

Job Readiness - The condition of being ready for job placement. A "job ready" individual has competitive employment ability, as well as basic knowledge in filling out employment applications, effective interviewing skills and ability to ride public transportation vehicles, and budget and manage personal finances.

Job Seeking Skills - Those skills that enable a person to seek out job openings and apply for them. This includes knowledge of where to find information about job openings, how to fill out an application, how to handle an interview, etc.

Job Site - The physical location within the community where an actual job is performed.

Job Task - An actual single work activity that is taken in its entirety without any changes directly from a specific job.

Job Tryout - This is a placement used as an evaluation tool in which: 1) the individual receives wages, 2) the placement is primarily for the employer's benefit, 3) the individual is an employee, and 4) the setting is controlled by the employer. The individual may not succeed and is given further help if he does not.

Limited English-Speaking Ability - When used about an individual it means: 1) individuals who were not born in the United States or whose native tongue is a language other than English, and 2) individuals who came from environments where a language other than English is dominant, and therefore, have difficulties speaking and understanding instruction in English.

Low Income Family or Individual - Families or individuals determined as low-income according to the latest available data from the Department of Commerce.

Manual Dexterity - The ability to move the hands skillfully in placing and turning motions.

Marketing and Distributive Education - Vocational marketing and distributive preparation education provides instruction at the 10th, 11th and 12th grades for entry or advanced levels within the field. Instruction focuses on marketing functions including selling, buying products for resale, purchasing raw materials for manufacturing, sales promotion, public relations and supportive activities. These include financing, marketing, research, material handling, and marketing management. Teachers must be vocationally certified in marketing and distributive education including cooperative education endorsement, when such endorsement is appropriate.

National Advisory Council (NACVE) - The previously existing National Advisory Council on Vocational Education that is continued by Section 162 of the Act.

National Rehabilitation Association (N.R.A.) - An association of individuals who are concerned about and wish to promote improvement of rehabilitation services to the handicapped. The six divisions of the association comprise the professional organizations of various rehabilitation specialties, National Rehabilitation Counseling Association, National Association of Disability Examiners, Job Placement, Administrative and Supervisory Practices, Vocational Evaluation and Work Adjustment Association, and National Association of Rehabilitation Secretaries.

On-the-job Evaluation - This is an evaluation tool where an individual actually participates in the specific job requirements. The following characterize this type of evaluation: 1) an individual may not be paid, 2) it is for the individual's benefit, 3) it does not necessarily result in employment, 4) the employer does not receive any immediate gain, 5) the individual does not displace or fill vacant worker slots, and 6) the individual's performance may be supervised by the employer or evaluation staff.

Positive Reinforcement - The process of increasing the frequency of a behavior by following it with a stimulus that carries reward value for the individual (e.g. praise).

Postsecondary Educational Institution - A nonprofit institution legally authorized to provide postsecondary education within a state for persons sixteen years of age or older, who have graduated from or left elementary or secondary school.

Postsecondary Program - (for reporting purposes) Vocational education for persons who have completed or left high school and who are enrolled in organized programs of study for which credit is given toward an associate or other degree but which are not designed as baccalaureate or higher degree programs.

Private Vocational Training Institution - A business or trade school, a technical institution or other technical or vocational school that: 1) admits as regular students only persons who have completed or left elementary or secondary school and who have the ability to benefit from the training offered by such institution; 2) is legally authorized to provide, and provides within the state, a program of postsecondary vocational or technical education designed to fit individuals for useful employment in recognized occupations; 3) has been in existence for two years or has been specially accredited by the commissioner as an institution meeting the other requirements of this subsection; and 4) is accredited.

Production Rate - The rate at which a worker produces goods or performs services. Production rate may be measured in time required to complete a task, number of work units completed in a specified period of time, and/or errors made or scrap produced.

Profile - A graphic representation of the performance of an individual on a series of tests, especially the tests in an integrated battery.

Program Improvement Services - Those activities, services and functions carried out to support and improve the quality of vocational education programs, including teacher training and curriculum development, but excluding administration.

Program Standards - Models designed to serve as guides in the establishment, maintenance and evaluation of quality vocational education programs.

Rehabilitation Plan - A written plan of services (medical, psychological, social, and/or vocational) that are needed to effect an individual's preparation for, entrance into and adjustment in employment.

Reliability - Refers to the consistency of assessment instruments in measuring a trait or skill. Reliability is usually expressed statistically as a correlation coefficient.

School Facilities - 1) classrooms and related facilities (including initial equipment) and interests in lands on which such facilities are constructed, and 2) does not include any facility intended primarily for events for which admission is charged to the general public.

Secondary Program - Vocational education for persons in secondary grades as defined by state law. (ARS 15-501)

Sheltered Workshop - A place providing transitional and/or long-term employment in a controlled and protected working environment for those who are unable to compete or to function in the open job market due to their handicap. Vocational evaluation and work adjustment may also be available.

Situational Assessment - An assessment technique utilizing systematic observation in established or created environments. Examples include evaluation in a vocational training setting, job tryout, and on-the-job evaluation.

Spatial Discrimination - The ability to comprehend forms in space and understand relationships of plane and solid objects. Frequently described as the ability to visualize objects of two or three dimensions.

State Board of Vocational Education - The single state educational agency designated or created by law that is responsible for statewide policy, planning, administration and supervision of the administration of vocational education programs at all levels.

State Plan - The description of the state educational effort to administer, maintain, expand and strengthen existing vocational education programs and to develop new programs.

Trade and Industrial Education - Vocational *preparation* courses are offered at the 10th, 11th and 12th grades in two class period blocks to develop manipulative skills, safety judgments, trade ethics, leadership abilities, technical knowledge, and related occupational information for industrial manufacturing, and transportation clusters. Teacher must be vocationally certified in Trade and Industry.

Unpaid Employment - Work-related services and activities including volunteer work in recognized occupations for which there is no direct financial compensation.

Validity - The degree to which a test, work sample, or other evaluative device measures what it is supposed to measure.

Vocational Assessment (Individual) - The process of determining an individual's strengths and limitations that facilitate or interfere with vocational outcomes and using this information for developing proposals for vocational service plans.

Vocational Assessment (Program) - The process of measuring the quality of a vocational education program against an established set of standards to identify particular strengths and weaknesses. The purpose of the assessment is to obtain objective information about the program in order to provide specific recommendations for program improvement.

Vocational and Consumer and Homemaking Education - Vocational consumer and homemaking education includes courses at 9th, 10th, 11th and 12th grades consisting of instructional programs, services and activities for the occupation of homemaking including consumer education, food and nutrition, family living and parenthood education, child development and guidance, housing, and home management and clothing and textiles. T ers must be vocationally certified in consumer and homemaking.

Vocational Education - Organized educational programs directly related to the preparation of individuals for paid or unpaid employment, or for additional preparation for a career requiring other than a baccalaureate or advanced degree. For purposes of this paragraph, the term "organized education program" means only: 1) instruction related to the occupation or occupations for which the students are in training or instruction necessary for students to benefit from such training, and 2) the acquisition, maintenance, and repair of instructional supplies, teaching aids and equipment.

Vocational Evaluation - The process of gathering, interpreting, analyzing and synthesizing all vocationally significant data regarding an individual, and relating it to occupational requirements and opportunities. Major tools used in this process include: behavior observation, interest, achievement/aptitude testing, work sampling, job tryouts, and situational assessment.

Vocational Evaluation Report - A logical, well-planned, carefully written means of communicating vital vocational information about an individual. It usually includes a picture of the individual's worker traits and how they compare to requirements of selected jobs or work areas, physical capacities, vocational factors, and recommendations for further services.

Vocational Exploration - Learning that provides students with an overview of work characteristics, work requirements and employment opportunities within certain definite categories of employment. Each vocational exploration program shall provide for student participation in actual or job simulated activities as well as direct interaction with workers.

Vocational History - A chronological ordering of past employment, with specific reference to jobs held, skills acquired, level of responsibility, remuneration and reasons for termination of employment.

Vocational Home Economics Occupations - Vocational home economics preparation courses at the 10th, 11th and 12th grades emphasize acquiring competencies needed for entry or advanced levels of work within the service occupations including food preparation and service, child care and care of the elderly, home furnishing design and equipment, clothing design and service, and institutional services. Teachers must be vocationally certified in home economics occupations.

Vocational Instruction - Instruction designed to prepare individuals for employment in a specific occupation or cluster of closely related occupations in an occupational field that is especially suited to their needs. Such instruction may include: 1) classroom instruction; 2) classroom-related field, shop, and laboratory work; 3) programs providing occupational work experience and related instructional aspects of apprenticeship programs; 4) remedial programs designed to enable individuals to profit from instruction related to the occupation or occupations for which they are being trained by correcting any educational deficiencies or handicaps preventing them from benefiting from such instruction; and 5) activities of vocational student organizations that are an integral part of the vocational instruction, subject to the provisions in sub-section 104-513.

Vocational Preparation - An organized set of specialized courses that are: 1) directly related to the preparation of individuals for occupations that normally do not require a baccalaureate or advanced degree for employment or advancement, and 2) which are designed in total to provide a student with sufficient skills for entry directly into a wage-earning occupation.

Vocational Rehabilitation - A process, consisting of a planned, orderly sequence of services related to the total needs of a handicapped individual, to bring about the vocational adjustment of that person.

Work Adjustment - See "Adjustment Programs."

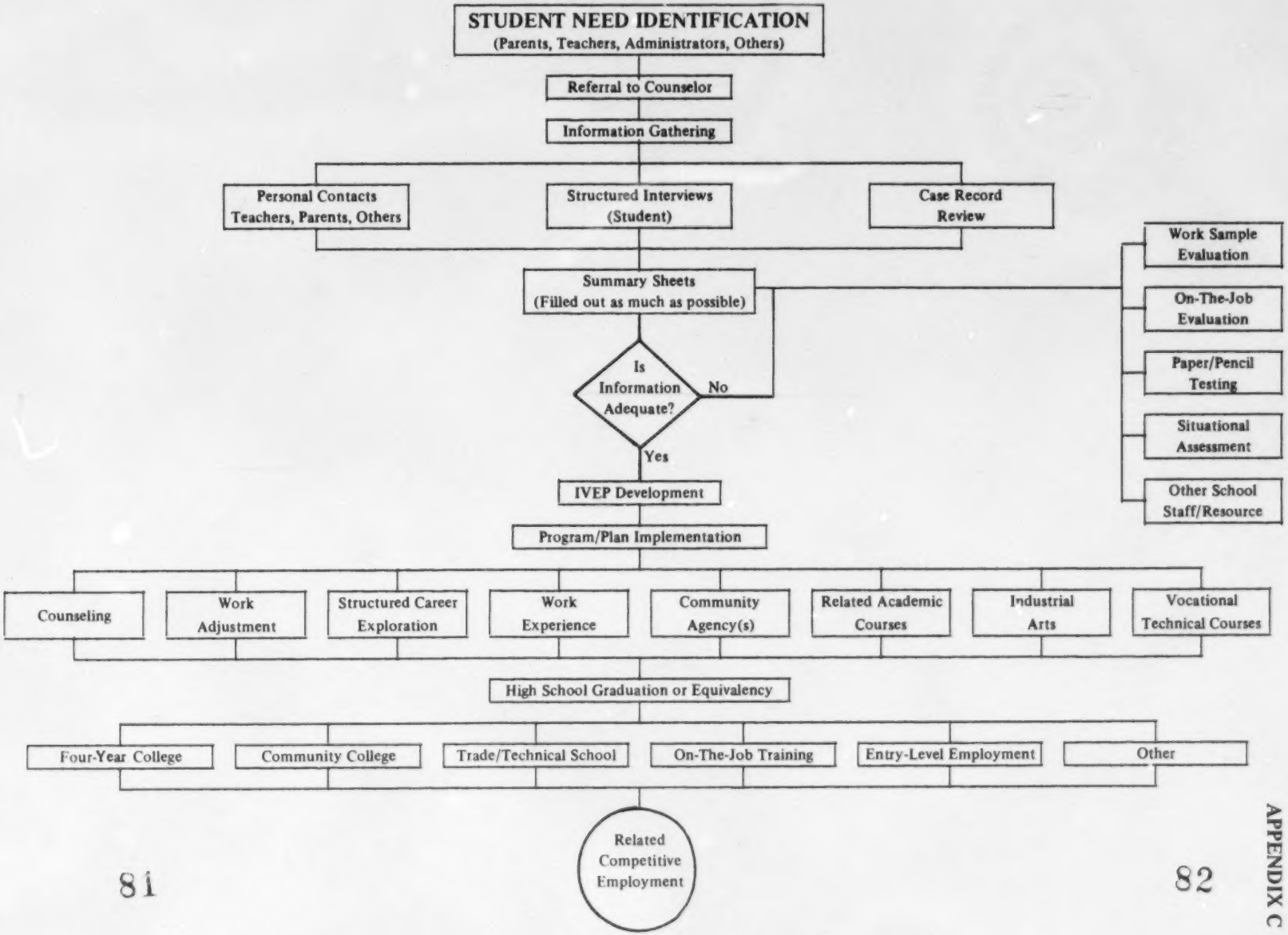
Work Sample - A work activity involving tasks, materials and tools that are identical or similar to those in an actual job or cluster of jobs. It is used to assess vocational interests and aptitude in that job area. A work sample could be any of the following: 1) an actual job moved into the evaluation unit, 2) a simulation of an actual operation, 3) a trait sample that assesses a single factor (e.g. dexterity), or 4) a cluster trait sample that measures a group of traits.

Work Sample Manual - A guide for the administration and scoring of a work sample. This manual usually includes: instructions to the evaluator for setting up, administering and scoring the work sample; client orientation; instructions for the client's list of equipment and materials; forms for scoring and recording behaviors; norm groups; reports of validation and reliability studies; information on jobs relating to the work sample, including *Dictionary of Occupational Titles*' codes; and prerequisites for administering the work sample.

Work Sample Norms - Specified standards that enable an evaluator to compare an individual's performance on a work sample with meaningful criteria; e.g., industrial workers, performance for workshop, local or national standards.

Worker Traits - Worker requirements in terms of aptitudes, education, vocational preparation, physical demands and personal traits.

STUDENT ASSESSMENT AND PLANNING PROCESS



TESTS AND PUBLISHERS

The following is a list of tests and test publishers and an indication of the relative value of these instruments in one or more of the six assessment areas. The list is by no means comprehensive; rather it is a compilation of many of the tests used for vocational evaluation or general psychometric testing purposes. A list of resources for additional information in the areas of assessment, career education and guidance is also included.

	JOB AWARENESS	NEEDS	SKILLS AND ABILITIES	WORK HABITS	INTERESTS	DAILY LIVING SKILLS
THE PSYCHOLOGICAL CORPORATION (Educational & Psychological - 2 catalogs) 757 Third Avenue New York, NY 10017						
Adult Basic Learning Examination			X			
Baranquilla Rapid Survey Intelligence Test (Spanish)			X			
Bender Visual Motor Coordination Test			X			
Bennett Hand Tool Dexterity Test			X			
Bennett Mechanical Comprehension Test			X			
College Qualification Test			X			
Crawford Small Parts Dexterity Test			X			
Design Judgment Test (artistic occupations)			X			
Differential Aptitude Test (battery)			X			
Gates-MacGinitie Reading Test			X			
General Clerical Test			X			
Minnesota Multi-Phasic Personality Inventory		X		X		
Minnesota Vocational Interest Inventory	X	X			X	
Oral Directions Test			X			
Raven Progressive Matrices (all nonverbal)			X			
Revised Minnesota Paper Form Board Test			X			
Stanford Achievement Test			X			
Vineland Social Maturity Scale		X				X
Watson-Glaser Critical Thinking Appraisal			X			
Wechsler Adult Intelligence Scale			X			
Wechsler Intelligence Scale for Children			X			
Wechsler Memory Scale			X			
Wide Range Achievement Test			X			
Wide Range Vocabulary Test			X			
SCIENCE RESEARCH ASSOCIATES Order Department 259 East Erie Chicago, IL 60611						
Computer Programmer Aptitude Test Battery			X			
Purdue Pegboard Test			X			

	JOB AWARENESS	NEEDS	SKILLS AND ABILITIES	WORK HABITS	INTERESTS	DAILY LIVING SKILLS
CONSULTING PSYCHOLOGISTS PRESS, INC. 577 College Avenue, P.O. Box 11536 Palo Alto, CA 94036						
Jesness Inventory			X			
Self-Directed Search	X		X		X	
Vocational Preference Inventory	X		X		X	
AMERICAN GUIDANCE SERVICE, INC. Publishers Building Circle Pines, MN 55014						
Minnesota Rate of Manipulation Test			X			
Minnesota Spatial Relations Test			X			
INSTITUTE FOR PERSONALITY AND ABILITY TESTING 1602 Coronado Drive Champaign, IL 61820						
Children's Personality Questionnaire		X				
High School Personality Questionnaire		X				
Sixteen Personality Factor Questionnaire		X				
NCS/INTERPRETIVE SCORING SYSTEMS 4401 West 76th Street Minneapolis, MN 55435						
Career Assessment Inventory	X	X			X	
Sixteen Personality Factor Questionnaire		X				
Strong-Campbell Interest Inventory	X				X	
CTB/McGRAW-HILL Order Service Center Del Monte Research Park Monterey, CA 93940						
Career Maturity Inventory	X	X				
California Achievement Test			X			
Occupational Interest Inventory	X	X			X	

	JOB AWARENESS	NEEDS	SKILLS AND ABILITIES	WORK HABITS	INTERESTS	DAILY LIVING SKILLS
GUIDANCE ASSOCIATES 1526 Gilpin Avenue Wilmington, DE 19806						
Wide Range Interest & Opinion Test	X	X			X	
AMERICAN ASSOCIATION ON MENTAL DEFICIENCY 5101 Wisconsin Avenue, N.W. Washington, DC 20016						
AAMD-Becker Reading Free Vocational Interest Inventory	X	X			X	
AAMD Adaptive Behavior Rating Scale		X		X		X
IBM CORPORATION						
Card Punch Aptitude Test			X			
VOCATIONAL/PSYCHOLOGICAL RESEARCH Elliott Hall University of Minnesota Minneapolis, MN 55455						
Minnesota Importance Questionnaire		X			X	

Other tests, catalogs, or resources of interest:

STOELTING COMPANY
424 North Homan Avenue
Chicago, IL 60624

Leiter Intelligence Test
Various kinds of testing apparatus

MEYLAN STOPWATCH CORPORATION
264 West 40th Street
New York, NY 10018

All types of stopclocks and timers

MATERIALS DEVELOPMENT CENTER
Department of Rehabilitation & Manpower Services
University of Wisconsin - Stout
Menomonie, WI 54751

Work Sample Manual Clearinghouse
Vocationally-related publications

WEST VIRGINIA REHABILITATION Research & Training Center One Dunbar Plaza, Suite E Dunbar, WV 25064	The Preliminary Diagnostic Questionnaire
JOHNSON PUBLISHING COMPANY 428 South Wilbur Mesa, AZ	Revised Occupational Profiles Kits (Career Education and Occupational Guidance)
CAREER AIDS, INC. 8950 Lurline Avenue, Dept. F Chatsworth, CA 91311	Materials for occupational, vocational and career education
CURRICULUM ASSOCIATES, INC. 5 Esquire Road North Bellerica, MA	Variety of assessment and curriculum materials
INTERPRETIVE SCORING SYSTEMS 4401 West 76th Street Minneapolis, MN 55435	Interest, personality, values and other assessment tools
CAREERS, INC. 1211 10th Street S.W. P. O. Box 135 Largo, FL 33540	Career education and guidance materials
PESCO 21 Paulding Street Pleasantville, NY 10570	Assessment, occupational information and other materials

COMMERCIAL WORK SAMPLE MANUFACTURERS

The administration, scoring and interpretation of work samples often consumes a great deal of time and effort during the evaluation process. However, they may also be the most important sources of vocational information regarding the individual being evaluated. For this reason, it is important to give special consideration to the purchasing of appropriate work sample systems for your unit.

One important consideration is the *population to be evaluated.* For example, if the majority of your students are visually impaired, you would consider work samples amenable to tactile administration, as opposed to those that rely on vision. Also, you must consider if the work sample *norm groups* would be appropriate comparisons for your population?

Another factor to be considered is the *purpose of the evaluation.* Do you want to look at specific work skills, or get your unit to serve a vocational exploration function? Also, do the skills you are assessing *relate to training areas or jobs* available in your community?

More practical considerations include the amount of *available money* for purchasing, the *physical capacities* of the evaluation room, and the *time* in which evaluations need to take place. (Two shorter work sample tasks may be more efficient than one lengthy administration.)

It is also important to regard the evaluator(s)' previous training. Some systems may include complete work sample explanations; others may be less detailed and assume the evaluator already has vocational expertise. Some may require training with a purchase; others have consultants available for orientation and training if requested. It may be wise to hire a *vocational consultant* who has had experience in many of the commercial systems to aid you in your purchase/training. The Division of Special Program Services, Vocational Education, Instructional Access, Arizona Department of Education is generally aware of work sample systems in use in local school districts and can also be used as a resource during the planning stages.

Below are the names of several commercial work sample manufacturers. Keep in mind that new systems are constantly reaching the market, and others may have been inadvertently omitted.

Partial List of Commercial Work Sample Manufacturers

CARRELS FOR HANDS-ON INDIVIDUALIZED CAREER EDUCATION (CHOICE):	Career Research Corporation P. O. Box 151277 Salt Lake City, UT
COATS WORK SAMPLE:	Prep Inc. 10007 Whitehead Road Extension Trenton, NJ 08638 609-695-0088
HESTER EVALUATION SYSTEM:	Evaluation Systems, Inc. 640 North LaSalle Street, Suite 698 Chicago, IL 60610
HESTER-PHOENIX ABILITY SURVEY SYSTEM:	Human Services Data Center Two North Riverside Plaza, Suite 2213 Chicago, IL 60606 312-454-0900
JEVS, VIEWS, VITAS WORK SAMPLE SYSTEM:	Vocational Research Institute - JEVS 1700 Sansom Street Philadelphia, PA 19103 215-893-5900

McCARRON-DIAL EVALUATION SYSTEMS:	McCarron-Dial Systems P.O. Box 45628 Dallas, TX 75245 214-247-5945
MICRO-TOWER GROUP VOCATIONAL EVALUATION SYSTEM:	Micro-Tower Institute Services ICD Rehabilitation & Research Center 340 East 24th Street New York, NY 10010 212-679-0100
PROJECT DISCOVERY:	Experience Education 402 Reed Street Red Oak, IA 51566
S.A.V.E. SYSTEMATIC APPROACH TO VOCATIONAL EVALUATION:	S.A.V.E. Enterprises P.O. Box 5871 Rome, GA 30161
SINGER WORK SAMPLE EVALUATION SYSTEM, CAREER AWARENESS LABORATORY:	Singer Educational Division Career Systems 80 Commerce Drive Rochester, NY 14623 716-334-8080
TALENT ASSESSMENT PROGRAMS (TAPS):	Talent Assessment, Inc. P. O. Box 5087 Jacksonville, FL 32205
TOOL TECHNOLOGY (MIND):	Mind, Incorporated 181 Main Street Norwalk, CT 06851
THE TOWER SYSTEM:	ICD Rehabilitation Research 340 East 24th Street New York, NY 10010
VALPAR COMPONENT WORK SAMPLES, PRE-VOCATIONAL READINESS BATTERY, JOB READINESS MATERIALS, V.O.I.C.E.:	Valpar Corporation 3801 East 34th Street, Suite 105 Tucson, AZ 85713 602-790-7174
VOCATIONAL SKILLS ASSESSMENT AND DEVELOPMENT PROGRAM:	Broadhead-Garrett Company 4560 East 71st Street Cleveland, OH 44105
WIDE RANGE EMPLOYABILITY SAMPLE TEST (WREST):	Jastak Associates, Inc. 1526 Gilpen Wilmington, DE 19806

RESOURCES FOR OCCUPATIONAL INFORMATION

Occupational information, as defined in the Vocational Evaluation and Work Adjustment Association Glossary, is "all pertinent facts about a job or job cluster which accurately define the characteristics and requirements of the job, so an individual looking for work will have correct, adequate information for making vocational plans and decisions." Obviously, this type of information is an important resource in the assessment process detailed in this guide. Following is a list of possible sources of occupational information which is by no means inclusive of all such sources:

DICTIONARY OF OCCUPATIONARY TITLES (1977):	Superintendent of Public Documents U. S. Government Printing Office Washington, DC 20402
OCCUPATIONAL OUTLOOK HANDBOOK:	Superintendent of Public Documents U. S. Government Printing Office Washington, DC 20402
CAREERS, INC. EXPLORATORY KIT:	Careers, Inc. P. O. Box 135 Largo, FL 33540
COUNSELOR'S INFORMATION SERVICE:	B'Nai B'Rith Career and Counseling Service 1640 Rhode Island Avenue Washington, DC 20036
CAREER INFORMATION KIT:	Science Research Associates, Inc. 259 East Erie Street Chicago, IL 60611
CHRONICLE GUIDANCE OCCUPATIONAL LIBRARY:	Chronicle Guidance Publications, Inc. Moravia, NY 13118
GUIDE TO OCCUPATIONAL EXPLORATION:	Superintendent of Documents U. S. Government Printing Office Washington, DC 20402
ARIZONA DEPARTMENT OF ECONOMIC SECURITY:	Labor Market Information P. O. Box 6123 Phoenix, AZ 85005
ARIZONA CAREER INFORMATION SYSTEM (ACIS):	Arizona Career Information System 1910 West Jefferson, Suite 2 Phoenix, AZ 85009
GUIDANCE INFORMATION SYSTEM (GIS):	Time Share Corporation P. O. Box 683 Hanover, NH 03755

REFERENCES AND SELECTED BIBLIOGRAPHY

Arizona Career Information System (ACIS). 1910 West Jefferson, Suite Z, Phoenix, Arizona 85009.

Becker, Ralph L. *Reading-Free Vocational Interest Inventory Manual.* American Association On Mental Deficiency, 5105 Wisconsin, N.W., Washington, D.C. 20016. (1975)

Dictionary of Occupational Titles, 4th Ed., U.S. Department of Labor, Employment and Training Administration. For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. (1977)

Dunn, Dennis J., Korn, Thomas A., and Andres Jason D. (Editors), *Critical Issues in Vocational Evaluation.* Research and Training Center, The Stout Vocational Rehabilitation Institute, University of Wisconsin - Stout, Menomonie, Wisconsin 54751. (1976)

Esser, Thomas J. *Client Rating Instruments For Use In Vocational Rehabilitation Agencies.* Materials Development Center. Department of Rehabilitation and Manpower Services, University of Wisconsin - Stout, Menomonie, Wisconsin 54751. (1975)

Esser, Thomas J. *Effective Report Writing In Vocational Evaluation and Work Adjustment Programs.* Materials Development Center, Department of Rehabilitation and Manpower Services, University of Wisconsin - Stout, Menomonie, Wisconsin 54751. (1974)

Federal Register, Vol. 42, No. 191, Appendix A - Definitions, Monday, October 3, 1977.

Fry, R., *Occupational Information in Vocational Evaluation.* Materials Development Center, University of Wisconsin - Stout, Menomonie, Wisconsin (1978)

Guidance Information System (GIS), Time Share Corporation, Box 683, Hanover, New Hampshire 03755. (1979)

Holland, John L., Ph.D. *The Self-Directed Search Professional Manual.* Consulting Psychologists Press, Inc., 577 College Avenue, Palo Alto, California 94306. (1979)

Hopke, Wm. E. (Editor) *Encyclopedia of Careers and Vocational Guidance.* J. G. Ferguson Publishing Company, Chicago, Illinois. (1977)

Jastak, Joseph F. and Jastak, Sara L. *Wide Range Interest Opinion Test Manual.* Jastak Associates, Inc., Wilmington, Delaware. (1979)

Occupational Outlook Handbook, U.S. Department of Labor, Employment and Training Administration. For sale by The Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. (1980)

Pardue, W., and Potyka, J., Vocational Evaluation and Work Adjustment Association Glossary, *VEWAA-CARF: Vocational Evaluation and Work Adjustment Standards with Interpretive Guidelines and VEWAA Glossary.* Menomonie, Wisconsin: Univeristy of Wisconsin-Stout, Materials Development Center (1978)

Suggested Publications for Developing an Agency Library on Work Evaluation, Adjustment, and Facility Management. Materials Development Center, Department of Rehabilitation and Manpower Services, University of Wisconsin - Stout, Menomonie, Wisconsin 54751. (1980)

Vocational Evaluation Project Final Report. Materials Development Center, Department of Rehabilitation and Manpower Services, University of Wisconsin - Stout, Menomonie, Wisconsin 54751. (1975)

Vocational Evaluation Resource Manual and Supplement. Research and Training Center, The Stout Vocational Rehabilitation Institute, University of Wisconsin - Stout, Menomonie, Wisconsin 54751.